

SPECIES CATALOGUE OF ORTHALICOIDEA IN ARGENTINA (GASTROPODA: STYLOMMATOPHORA)

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ABSTRACT

We provide here a catalogue of all available species nomina of Orthalicoidea occurring in Argentina. Ongoing taxonomic revisions on the genera *Bostryx* Troschel, 1847, *Clessinia* Doering, 1874, *Pilsbrylia* Hylton Scott, 1952, and *Spixia* Pilsbry & Vanatta, 1898, highlighted the necessity of an updated catalogue for the region. A total of 101 orthalicoidean species classified into four families, Bothriembryontidae, Bulimulidae, Odontostomidae and Simpulopsidae are present in Argentina. The catalogue provided here is based on examination of primary literature, available revisions and monographs, comparative studies within and among species and revision of museum data, including most type specimens. Additional collection of specimens in various localities of the country was carried out for more than a decade to be able to accurately state distributional information on the species treated. Nomenclatural details are provided for all nominal species. Name-bearing types were located for 86 species-group taxa, and six lectotypes were designated for the stabilization of the taxonomy. We propose the following nine new combinations: *Bulimulus fourmiersi* (d'Orbigny, 1835), *Clessinia cordovana* (Pfeiffer, 1855), *Drymaeus flossdorfi* (Holmberg, 1909), *Cyclodontina* (*Ventania*) *avellanadae* (Doering, 1881), *Simpulopsis* (*Eudioptus*) *eudioptus* (Ihering in Pilsbry, 1897), *Spixia champaquiana* (Doering, 1875), *S. charpentieri* (Grateloup in Pfeiffer, 1850), *S. minor* (d'Orbigny, 1837) and *S. parodizi* (Hylton Scott, 1951). The following four new synonymies are proposed: *Bostryx sophieae* Breure, 1979, with *Bulimus cordillerae* (Strobel, 1874) (current name *Bostryx cordillerae*); *Cyclodontina* (*Clessinia*) *gracilis* Hylton Scott, 1956, with *Bulimus cordovanus* Pfeiffer, 1855 (current name *Clessinia cordovana*); *Spixia estherae* Fernández, 1971, with *Odontostomus* (*Spixia*) *costellifer* Hass, 1936 (current name *Spixia costellifer*); *Kuschelenia simulans* Hylton Scott, 1951, with *Helix tupacii* d'Orbigny, 1835 (current name *Scutalus tupacii*). *Bulimulus sporadicus gracilis* Hylton Scott, 1948, is changed from subspecific to specific status.

Key words: South America, Pulmonata, Stylommatophora, available nomina.

INTRODUCTION

Orthalicoidea is a large taxon and a major component of the land gastropod fauna in South American countries. This monophyletic superfamily is distributed in Melanesia, New Zealand, Australia, Africa, South America, the West Indies and Central America north to southern United States (Breure et al., 2010; Breure & Romero, 2012).

The taxonomic composition, as well as the status of their components, is a subject of debate to present days. The group was

originally divided into five subfamilies by Pilsbry (in various works between 1895 and 1902) on the bases of anatomical characters. Zilch (1959–1960) divided Bulimulacea (= Orthalicoidea) into six families that also included Cerionidae and Urocoptidae, now classified into a different superfamily. Later, Breure (1979) on the grounds of anatomical information, considered Zilch families as subfamilies of Bulimulidae. Breure et al. (2010) using DNA sequences of 22 taxa spanning all the Orthalicoidea, explored the phylogenetic relationships within the superfamily and concluded that the

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clades (A: Bulimulidae, B: Odontostomidae, C: Bothriembryontidea, D1: Orthalicinidae, D2: Amphibulimidae) obtained in their analysis should be given familiar status. Breure (2011) also gave family rank to Simpulopsidae Schileyko, 1999, which is now classified together with the other five families into Orthalicoidea. Recently, Breure & Romero (2012) proposed a new molecular phylogenetic hypothesis of Orthalicoidea with strong support for its monophyly as well as for such clades as Bulimulidae, Bothriembryontidae, Amphibulimidae, Simpulopsidae and Orthalicidae. Other groups such as Odontostomidae and Megaspiridae showed low support and appeared in their analysis as paraphyletic. Previous published catalogues and check lists reporting on this superfamily in Ecuador (Breure & Borrero, 2008), Colombia (Linares & Vera, 2011), Brazil (Campos Salgado & Santos Cohelo, 2003; Simone, 2006) and Peru (Ramirez et al., 2003) showed that this superfamily is one of the most diverse and species rich of all Neotropical land gastropods. However, vast areas in South America still remain unknown concerning to such basic questions as which or where species occur.

In Argentina, Orthalicoidea represent the richest group of land snails and is widely distributed in almost all the different ecoregions, with the exception of southern areas and Antarctica. Only four out of the seven families composing Orthalicoidea (sensu Breure & Romero, 2012), Bothriembryontidae, Bulimulidae, Odontostomidae and Simpulopsidae, inhabit in Argentina, being Odontostomidae and Bulimulidae the richest and phylogenetically diverse.

Land gastropods in Argentina were studied during the nineteenth century and most species were described since then, but generic revisions are still scarce. Alcide d'Orbigny (1834–1847, 1835) was one of the most prolific researchers and the author of 33 land gastropod species of Argentina. In Orthalicoidea, most of *Drymaeus* Albers, 1850, species were described by him. Adolfo Doering, who emigrated from Germany to Argentina to work at the Academy of Sciences of Cordoba, had a great influence in the development of malacology in Argentina in general and especially in the study of odontostomids land snails. Doering is the author of around 30 bulimulid and odontostomid species. A colleague and contemporary researcher of Doering, Eduardo L. Holmberg, also described *Bulimulus* and *Bostryx* species from Argentina. Later, in the mid twentieth century such other researchers as M. I. Hylton Scott, J. J. Parodiz

and W. Weyrauch gave impetus to pulmonate gastropods research in Argentina describing numerous new species from different areas and reviewing several genera. Barbosa et al. (2008) provided a complete list of species published by W. Weyrauch.

Previous species catalogues of Argentinean land gastropods were prepared by Parodiz (1957a, b) reporting the existence of 97 taxa, and Fernández (1973a, b) recording 114 orthalicoidean species in the country. However, many taxonomic changes, especially concerning the status of genera and families, as well as their species composition have changed since then. There is an urgent need to accurately identify neotropical land snail species for biodiversity, conservation, phylogenetic and phylogeographic studies. Taxonomic knowledge remains essential to credible biological research and is made urgent by the biodiversity crisis (Wheeler, 1995, 2004). As pointed by Dubois (2010), the nomenclatural rules should be applied to correctly transmit and communicate about the living organisms. Failure to use correct names and spellings may cause ambiguities in communication and therefore increase our current taxonomic crisis (Wheeler, 1995; Dubois, 2010).

The object of this research is to provide an updated catalogue of the orthalicoidean species recorded in Argentina establishing their current classification and distribution.

MATERIAL AND METHODS

The material in this catalogue is housed in the main Argentinean malacological collections at public museums as well as in European and North American museums. The systematic in this study follows the arrangement proposed by Breure et al. (2010) and Breure (2011). Within each family, genera and species are arranged in alphabetical order.

The type locality for each species is given in quotation marks as it is stated in the original publication and in the same language used by the author. In some cases, further detail was added to clarify the geographic location and to give more precision to each type locality. This procedure is used because there were cases in which authors repeated the type locality as it is mentioned in previous publications. In some of these cases, the type locality is different from what was stated in the original species description.

Year of publication of species originally described by A. Doering are referred exactly as they were printed in each volume of the *Boletín de la Academia Nacional de Ciencias de Córdoba* or in *Periodico Zoológico*. Following the nominal year of publication, we have included in brackets the year cited as probable actual date of publication, in most cases in concordance with Pizá & Cazzaniga (2003, 2006, 2010, 2012).

The type material of each species have been search and consulted in museums where the author of each species worked. Although type material was found in most cases, in some other cases name-bearing types have been lost, especially concerning species described by A. Doering. In each case, the location of the type material is recorded and additional information is included in the Remarks when types were not found. We also added, when possible, the location of the types of species previously synonymized with the valid species name (in square brackets). Number of paratypes or paralectotypes specimens, in cases when possible, is included in parentheses after acronym and collection number.

Nomenclatural changes proposed in the present catalogue are shown in square brackets, previous changes established by other authors are shown in parentheses. In the species synonymy list, when the same author has several works one after another, the author's name in the first reference is followed by the successive dates without repeating author's name.

Lectotype fixation was done from syntypes to become the unique bearer of the name of a nominal species-group taxon in order to preserve stability of nomenclature according to Art. 74.1 and Art. 74-7 of the *International Code of Zoological Nomenclature* (ICZN). In each case, lectotypification was done with care and only under special conditions, following Köhler (2007). A specimen was selected to be a lectotype under the following criteria: (1) the measurements and figures given in the original description matches the selected specimen, (2) the locality was the same as that in the original species description, (3) no other type was known to exist, (4) the lot from which the relevant specimen was selected was part of the type series. Historical information was gathered in each malacological collection and author handwriting photographed and compared with lot labels. Following this procedure, the current lectotype designations are considered to contribute to a stable taxonomy. Shell mea-

surements (H, total shell length, DM, major diameter, Hap, total length of the aperture, Dap, diameter of the aperture) of new designated lectotypes and paralectotypes are provided. In cases in which no holotype or syntypes was fixed for a certain species and the taxon was based on more than one specimen, Recommendation 73F of the ICZN was followed, and the specimens were considered as syntypes rather than assuming a holotype. Synonymies proposed for the names listed below are based on the study of types, authoritatively identified specimens and original species descriptions and figures.

The distribution of genera is indicated at the level of the country. Current species distribution in Argentina is detailed with the province in italics and localities where they were collected, arranged in alphabetical order. Collection numbers are in parentheses. When only the province (Prov.) with no specific locality of occurrence is indicated on the label of the lot, the number of the lot follows directly after the province. When a question mark (?) is included after the country or province of occurrence, this means that there is doubt concerning this geographic location for the species in question. When "*" preceeds the name of a species in the catalogue, this means that this species is only mentioned to be present in the literature, but no voucher specimen is present at any collection, and the species was not found in recent field work in any locality in Argentina.

Most material deposited at the Instituto Fundación Miguel Lillo corresponds to specimens collected within at least the last ten years, meaning that current occurrence of the species in the mentioned localities was checked in the field. Total area distribution of each species is then determined on the bases of museum records and recent field work. In cases when occurrences of a species in other areas were obtained from literature citations, but for which there were no voucher specimens in museums, these localities have been noted in the Remarks for each species. Figures 1 and 2 illustrate type species of Orthalicoidea housed in Argentinean museums.

Museum and Collection Acronyms

The location of the name-bearing types is cited for each nominal species, when possible. The collections housing these name-bearing types are listed along with the acronyms used in the text.

ANC	Academia Nacional de Ciencias, Cordoba, Argentina	RESULTS
ANSP	Academy of Natural Sciences, Philadelphia, Pennsylvania, USA	Catalogue of Taxa, Synonymies and Type Data
CMNH	Carnegie Museum of Natural History, Pittsburgh, Pennsylvania, USA	Class Gastropoda Cuvier, 1798
FLMNH	Florida Museum of Natural History, Gainesville, Florida, USA	Subclass Heterobranchia Haszprunar, 1985
FMNH	Field Museum of Natural History, Chicago, Illinois, USA	Order Pulmonata Cuvier, 1817
IFML	Instituto-Fundación Miguel Lillo, Tucuman, Argentina	Suborder Stylommatophora Schmidt, 1856
MACN	Museo Argentino de Ciencias Naturales “Bernardino Rivadavia”, Buenos Aires, Argentina	Superfamily Orthalicoidea Albers, 1860
MACN-In	Invertebrate Collection	Family Bothriembryontidae Iredale, 1937
MACN-Pi	Paleoinvertebrate Collection	Genus <i>Discoleus</i> Breure, 1978
MCNL	Museo de Ciencias Naturales José Lorca, Mendoza, Argentina	Type Species: <i>Eudioptus aguirrei</i> Doering, 1884 [original designation].
MCZ	Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, USA	Geographic Distribution: Argentina.
MLP	Museo de Ciencias Naturales de La Plata, Buenos Aires, Argentina	<i>Discoleus aguirrei</i> (Doering, 1884) Fig. 1A
NHMUK	The Natural History Museum, London, UK	<i>Eudioptus aguirrei</i> Doering, 1884: 112, pl. 2, fig. 2; – Breure, 1974b: 111.
MNHN	Muséum National d’Histoire Naturelle, Paris, France	<i>Eudioptus mendozanus bonaërensis</i> Doering, 1884: 111, pl. 2, fig. 1.
MZSP	Museo de Zoologia San Paulo, San Paulo, Brazil	<i>Eudioptus mendozanus Azulense</i> Doering, 1884: 111.
RMNH	Nationaal Natuurhistorisch Museum / Naturalis, Leiden, The Netherlands	<i>Bulimulus (Bulimulus) ventanensis</i> Pilsbry, 1896: 189, pl. 1, fig. 8.
RBINS	Royal Belgian Institute of Sciences, Brussels, Belgic	
SMF	Natur-Museum Senckenberg, Frankfurt am Main, Germany	
USNM	National Museum of Natural History, Washington, D.C., USA	
ZMB	Museum für Naturkunde, Humboldt Universität, Berlin, Germany	
ZSM	Zoologische Staatssammlung München, Germany	

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FIG. 1. Type material of Bulimulidae species housed in Argentinean museums. A: *Discoleus aguirrei* (Doering, 1884) (lectotype ANC s/n); B: *Bostryx birabenorum* Weyrauch, 1965 (holotype IFML 985 a); C: *Bostryx catamarcanus* (Parodiz, 1956) (paratype MLP 11440); D: *Bostryx costellatus* (Hylton Scott, 1971) (holotype MACN-In 4221-1); E: *Bostryx famatinus* (Doering, 1879) (lectotype MACN-In 3233); F: *Bostryx pastorei* (Holmberg, 1912) (lectotype MACN-In 1517); G: *Bostryx reedi* (Parodiz, 1947) (holotype MACN-In 10001); H: *Bostryx rudisculptus* (Parodiz, 1956) (holotype MACN-In 380); I: *Bostryx stelzneri scaber* (Parodiz, 1948) (paratype MACN-In 4221); J: *Bostryx strobeli* (Parodiz, 1956) (holotype MACN-In 9916); K: *Bostryx willinki* Weyrauch, 1964 (holotype IFML 121a); L: *Bulimulus elatior* Hylton Scott, 1952 (paratypes IFML 735); M: *Bulimulus prosopidis* Holmberg, 1912 (lectotype MACN-In 1309); N: *Drymaeus flossdorfi* (Holmberg, 1909) (lectotype MACN-In 1352); O: *Drymaeus lynchi* Parodiz 1946 (holotype MACN-In 1344); P: *Naesiotus willinki* Breure, 1978 (holotype IFML 1263a); Q: *Kuschelenia simulans* Hylton Scott, 1951 (holotype MLP 11219). Photographs of *B. costellatus*, *B. famatinus*, *B. rudisculptus*, *B. strobeli* and *B. reedi* were provided by A. Tablado. Scale bar = 1cm.



Bulimulus (Bulimulus) aguirrei – Pilsbry, 1898: 320.

Bulimulus (Mormus) aguirrei – Holmberg, 1912b: 149.

Bulimulus (Lissoacme) aguirrei – Parodiz, 1944: 4.

Peronaeus (Lissoacme) aguirrei – Parodiz, 1946b: 315; 1947: 24; 1957b: 23; Fernández, 1969: 119, figs. 1–4; 1973a: 89.

Peronaeus (Lissoacme) azulensis – Parodiz, 1957b: 23; Fernández, 1970: 65, figs. 1–4.

Discoleus aguirrei – Breure, 1978: 198, figs. 335–340, pl. 22, figs. 7, 8; Breure, 1979: 91; Miquel, 1998: 179, figs. 3, 12, 19; Richardson, 1995: 94.

Discoleus azulensis – Breure, 1978: 198, fig. 341.

Discoleus azulensis mendozanus – Breure, 1979: 91.

Type Locality: “Cerro Claraz, Cerro de la Piedra Movediza, Sierra Tolosa”. The type locality is located in Tandil, Buenos Aires Prov.

Type Material: lectotype ANC s/n; paralectotypes ANC s/n (2) [present designation]. Lectotype: H = 23.3, DM = 11.3, Hap = 13.3, Dap = 8.1; paralectotype 1: H = 19.6, DM = 10.2, Hap = 11.7, Dap = 7.4; paralectotype 2: H = 23.5, DM = 12.0, Hap = 13.6, Dap = 9.2.

Distribution: Argentina, *Buenos Aires Prov.*, Abra del Pantanosa (MACN-In 26624), Azul (MACN-In 13058), Sierra de Cura Malál (MACN-In s/n), Tandil (MLP 7990, IFML 15657). *La Pampa Prov.* (MLP 7987), Lihuel Calel Dept. (MACN-In 6184; MLP s/n, IFML 15658).

Remarks

Material from the type series of *Eudioptus aguirrei* Doering, 1884, was found at the Zoological Museum of the Academia Nacional de Ciencias in Cordoba, Argentina, where Doering worked from 1872. This material is composed of three dry shells matching with the original description, type locality, similar dimensions and shell measurements provided by Doering (1884). The original label of this material is handwritten by Adolf Doering. Eduardo Holmberg gave the mollusks material gathered during his travels to Sierra de la Ventana (Holmberg, 1884) to Doering for identification, it was collected in Cerro Claraz during February 1882 by Eduardo Aguirre, an engineering working with Holmberg while they were prospecting the area of Sierra de la Ventana. At that time, Holmberg, as he explained himself, concentrated on the identification of insects and spiders of the area.

Discoleus ameghinoi
(Ihering, 1908)

Bulimulus ameghinoi Ihering, 1908: 430, fig. 1.
Bulimulus sporadicus pampa Ihering, 1914: 70.

Bulimulus (Lissoacme) ameghinoi – Parodiz, 1944: 1.

Peronaeus (Lissoacme) ameghinoi – Parodiz, 1946b: 315, pl. 1, fig. 2, pl. 2, fig. 2; 1947: 23; 1957b: 24; Fernández, 1969: 120, figs. 5–8; 1973a: 90.

Peronaeus (Lissoacme) ameghinoi madrynensis – Parodiz, 1944: 3; 1947: 24; 1957b: 24; Fernández, 1973a: 91.

Discoleus ameghinoi – Breure, 1979: 91; – Miquel, 1998: 181, figs. 1, 2, 4, 17, 19.

Type Locality: “étage bonaëreén du ruisseau Chapalmalán”. According to Miquel (1998) the type locality of *D. ameghinoi* is Banks of the river Chapadmalal, Gral. Pueyrredon, Buenos Aires, Argentina.

Type Material: holotype MACN-Pi 562a.
Peronaeus ameghinoi madrynensis holotype MACN-In 25878.

Distribution: Argentina, *Buenos Aires Prov.* (MACN-In 562, MACN-In 25878*), Tandil (MACN-In 16334, MACN-In 15361, MACN-In 6184). *Chubut Prov.*, Viedma Dept., Doradillo (MACN-In 25878, MACN-In 25878-1), Península Valdez (MACN-In s/n). *Río Negro Prov.*, San Antonio Dept., Fuerte Argentino (MACN-In 19555), Las Grutas (IFML 15659 A), San Antonio (MACN-In 31124, MLP 3109, MLP 7998, MLP 7999, MLP 7993, MLP 7994), Madryn (MLP 7996). *Santa Cruz Prov.*, Deseado Dept., Bahía de Sanguineto (MACN-In 18445).

Genus *Plectostylus*
Beck, 1837

Type Species: *Bulimus peruvianus* Bruguière [subsequent designation by Gray, 1847].

Geographic Distribution: Argentina, Chile.

Plectostylus mariae
Brooks, 1936

Plectostylus mariae Brooks, 1936: 124; – Parodiz, 1957b: 24; Hylton Scott, 1963: 396; Stuardo & Valdovinos, 1985: 57; Miquel, 1998: 183, figs. 5–7, 13, 16, 19.

Plectostylus vagabondiae Brooks, 1936: 125;
– Valdovinos & Stuardo, 1988: 138, figs. 2,
30–32, 41, 49, 55, 59, 70, 74.
Plectostylus argentinensis – Parodiz, 1951: 334.

Type Locality: “San Esteban, Chile”.

Type Material: lectotype CMNH 6228184.
Plectostylus argentinensis holotype MACN-In
6514; paratype MACN-In 6515.

Distribution: Argentina, *Chubut Prov.*, Futaleufú
Dept., Lake Menendez (MACN-In 30607).
Neuquen Prov., Lacar Dept., Lake Lacar (MACN-
In 32845, MACN-In 26345), San Martín de los
Andes (MACN-In 6514, MACN-In 6515).

Familia Bulimulidae
Tryon, 1867

Genus *Bostryx*
Troschel, 1847

Type Species: *Bulimulus (Bostryx) solutus* Tro-
schel, 1847 [original designation by monotypy].

Geographic Distribution: Argentina, Bolivia,
Chile, Perú, Colombia, Ecuador, Paraguay.

Bostryx birabenorum
Weyrauch, 1965
Fig. 1B

Bostryx (Lissoacme) birabenorum Weyrauch,
1965: 71, figs. 1–3; – Fernández, 1973a: 99;
Neubert & Janssen, 2004: 202.
Bostryx birabenorum – Miquel, 1993: 158, pl.
1, figs. 1, 2.

Type Locality: “Argentina, Provincia de Tucuman,
El Infiernillo cerca de Tafi del Valle, 3042 m”.

Type Material: holotype IFML 985 a; para-
types IFML 985 b (7), MLP 11620 (3), SMF
164112 (2).

Distribution: Argentina, *Tucuman Prov.*, Tafi
del Valle Dept., El Infiernillo (IFML 985, IFML
14924, MLP 11620), Valles Calchaquies
(MACN-In 23041, MLP 8122).

Bostryx catamarcanus
(Parodiz, 1956)
Fig. 1C

Bulimulus (Scansicochlea) catamarcanus
Parodiz, 1956b: 77, fig. 6; – Fernández, 1973a: 82.

Bostryx (Lissoacme) catamarcanus – Weyrauch,
1965: 73.

Bostryx catamarcanus – Breure, 1979: 52;
Miquel, 1993: 159, pl. 1 fig. 5.

Type Locality: “Concepción, provincia de Ca-
tamarca”. The locality is into the Capayán
Dept, Catamarca.

Type Material: holotype MACN-In 17778;
paratypes MACN-In 17778-1 (78), MLP
11440 (2).

Distribution: Argentina, *Catamarca Prov.*, Belén
Dept., Sierra de Belén (MLP 8061); Capayán
Dept., Concepción (MACN-In 17778, MACN-
In 17778-1, MLP 11440).

Bostryx cordillerae
(Strobel, 1874)

Bulimulus (Mesembinus) cordillerae Strobel,
1874: 22, pl. 1, fig. 3.

Bulimus (Mesembinus) Cordillera – Doering,
1875a [1877]: 340 [incorrect subsequent
spelling].

Bulimulus (Bulimulus) cordillerae – Doering,
1879: 72.

Bulimulus (Bulimulus) monticola Doering,
1879: 69, *non* Philippi, 1869 (secondary
homonymy).

Bostryx sophieae Breure, 1979: 58 (replace-
ment name for *B. (B.) monticola* Doering)
[new synonymy].

Peronaeus (Peronaeus) cordillerae – Parodiz,
1946b: 315, pl. 1, fig. 4; 1947: 2; Fernández,
1973a: 88.

Peronaeus cordillerae – Parodiz, 1957b: 23;
1961: 60.

Bostryx cordillerae – Breure, 1978: 66, fig. 87;
1979: 52; Köhler, 2007: 132.

Type Locality: “Gola di Villa Vicencio e Casa
de Piedra nelle Preande Mendozine ...
Latitudine: 32° 33’”. This locality is located
in Mendoza Prov., Las Heras Dept.

Type Material: lectotype ZMB 24975a; paralec-
totypes ZMB 24975b (3).

Distribution: Argentina, *San Juan Prov.*,
Calingasta-Zonda Dept., Sierra del Tontal
(MACN-In 12114). *Mendoza Prov.* (RMNH
s/n, MACN-In 10001-2 A, MACN-In 1354), Las
Heras Dept., Quebrada del Toro (MLP 897,
MLP 9669, MLP 9660, MACN-In 36944 A),
Casa de Piedra (ZMB 24975b), Cerro Pelado

(MLP 39802, MACN-In 9592 A), Quebrada de las Pircas (MACN-In 32867 A), Uspallata (MACN-In 19625 A, MACN-In 9849, MACN-In 9850), Villavicencio (IFML 15580, MACN-In 3234, MLP 8062, ZMB 24975a), Cerro El Arco (MCNL 361).

Remarks

B. cordillerae is synonymized with *B. sophieae* based on its shell morphology. Shell measurements of the lectotype fits into *B. cordillerae* size range. Moreover, area of distribution of *B. sophieae* is included in the area of occurrence of *B. cordillerae*.

Bostryx costellatus
(Hylton Scott, 1971)
Fig. 1D

Bulimulus (Scansicochlea) costellatus Hylton Scott, 1971: 77.

Bostryx costellatus – Breure, 1979: 53.

Bostryx birabenorum – Miquel, 1993: 158, pl. 1, fig. 2 [*partim*].

Type Locality: “Cerro de Cachi, Prov. de Salta”.

Type Material: holotype MACN-In 4221-1; paratypes MACN-In 4221-5 (3).

Distribution: Argentina, *Salta Prov.*, Cachi Dept. (MACN-In 4221-1, MACN-In 4221-5).

Remarks

Holotype label is handwritten by Hylton Scott under the name “*Scansicochlea costulata* Hylton Scott”, lot number MACN-In 4221.1. However, in the original description, the species name was *Bulimulus (Scansicochlea) costellatus*. Hylton Scott indicated that J. J. Parodiz gave this provisional name [*Scansicochlea costulata*] to this lot before she described it as a new species with the name *Bulimulus (Scansicochlea) costellatus*.

Bostryx cuyanus
(Pfeiffer, 1867)

Helix cuyana Pfeiffer, 1867a: 79; – Pfeiffer, 1867–1869b: 332, pl. 79, figs. 16–18.

Helix (Lysinoe) cuyana – Strobel, 1874: 11, pl. 1, fig. 2.

Helix cuyana – Doering, 1874a: 53.

Epiphragmophora cuyana – Doering, 1874b [1875]: 448.

Bostryx (Platybostryx) cuyana – Hylton Scott, 1954: 409.

Bostryx (Platybostryx) doelloi Hylton Scott, 1954: 412.

Platybostryx cuyana – Parodiz, 1957b: 24; 1961: 61; Fernández 1973a: 99.

Platybostryx doelloi – Parodiz, 1957b: 24; 1961: 61; Fernández 1973a: 100.

Bostryx cuyanus – Breure, 1978: 71, pl. 10, figs. 7, 11; 1979: 53; Miquel, 1993: 159, pl. 1, figs. 3, 4, pl. 2, fig. 16.

Bostryx lentiformis Breure, 1978: 96; – Breure, 1979: 55.

Bostryx doelloi – Breure, 1979: 53.

Type Locality: “Argentina, Mendoza Prov.”.

Type Material: Not located.

Bostryx (Platybostryx) doelloi: paratypes MACN-In 9592-3 (12), MACN-In 10000 (4), MLP 10980 (3), MLP 10981 (1), MLP 41801 (2); *Bostryx lentiformis*: holotype, MACN-In 12113a, paratypes, MACN-In 12113 (9), RMNH 55325 (2).

Distribution: Argentina, *Mendoza Prov.* (MCZ 141259), Las Heras Dept. (MACN-In 10000, IFML 15581, IFML 11010), Cerro Pelado (MLP 41801, MLP 10980, MACN-In 9592-3, MACN-In 10000, MCNL 1117), Guamparito (MACN-In 30498 A), Las Cuevas (MLP 10981), Uspallata (MACN-In 8845). *San Juan Prov.*, Sierra del Tontal (MACN-In 12113a, MACN-In 12113, RMNH 55325).

Bostryx famatinus
(Doering, 1879)
Fig. 1E

Bulimulus (Peronaeus) famatinus Doering, 1879: 63.

Bulimulus (Bostryx-Peronaeus) famatinus – Pilsbry, 1896: 152.

Peronaeus (Peronaeus) famatinus – Parodiz, 1946b: 315, 322, fig. 13; 1947: 7; Fernández, 1973a: 88.

Peronaeus famatinus – Parodiz, 1957b: 22.

Bostryx famatinus – Breure, 1979: 53; Miquel, 1995: 121, pl. 1, fig. 3.

Type Locality: “Sierra de La Rioja, en cuesta situada entre esta ciudad y Chilecito, a una altura de cerca de 2000 m”. The type locality as it is described by Doering is probably the Sierra de Velasco, a mountain system located between Sanagasta and Chilecito Depts. in La Rioja Prov., Argentina.

Type Material: lectotype MACN-In 3233, paralectotypes MACN-In 3233-1 (3) [present designation]. Lectotype: H = 17.02, DM = 5.59, Hap = 7.19, Dap = 4.13.

Distribution: Argentina, *La Rioja Prov.*, Sana-gasta Dept. (MACN-In 3233).

Bostryx mendozanus
(Strobel, 1874)

Bulimulus (Eudioptus) mendozanus Strobel, 1874: 23, pl. 1 fig. 4; – Doering, 1879: 70.

Bulimus (Eudioptes) Mendozaanus – Doering, 1875a [1877]: 340.

Bulimulus (Bulimulus) mendozanus – Pilsbry, 1897: 71, pl. 11, figs. 22, 23.

Peronaeus (Lissoacme) mendozanus – Parodiz, 1946b: 315; 1947: 26; 1957b: 23; 1961: 60; Fernández, 1973a: 94.

Bulimulus mendozanus – Breure, 1979: 63.

Bostryx mendozanus – Miquel, 1995: 121, pl. 1, fig. 4.

Type Locality: “Gola di Villa Vicencio, nelle Preande o Sierra de Mendoza, 1866... Latitudine: 32°–33°... Altezza: 1500–1800 m”. This type locality is located in Las Heras Dept. Mendoza Prov.

Type Material: syntype ZMB 24976 (1).

Distribution: Argentina, *Mendoza Prov.*, Las Heras Dept., Angostura de Villavicencio (ZMB 24976), Cordillera de Uspallata, Cerro de La Leña (MACN-In 9850, MACN-In 36977 A, MLP 8082).

Bostryx pastorei
(Holmberg, 1912)
Fig. 1F

Bulimulus (Mesembrinus) pastorei Holmberg, 1912a: 22.

Bulimulus (Scansicochlea) pastorei – Parodiz, 1946b: 315, 322, fig. 9, pl. 1, fig. 8; 1957a: 134; Fernández, 1973a: 85.

Peronaeus (Lissoacme) puntanus Parodiz, 1947: 13.

Bostryx puntanus – Breure, 1979: 57.

Bostryx pastorei – Miquel, 1995: 121, pl. 1 figs. 5, 6.

Type Locality: “Provincia de San Luis: en el Cerro Varela”. Cerro Varela is located in Capital Dept. of San Luis Prov.

Type Material: lectotype MACN-In 1517; paralectotypes MACN-In 1517-1 (6) [present designation]. Lectotype: H = 23.0, DM = 9.6, Hap = 10.68, Dap = 6.45; paralectotype 1: H = 19.92, DM = 9.14, Hap = 10.55, Dap = 6.03; paralectotype 2: H = 21.33, DM = 9.43, Hap = 10.77, Dap = 6.51; paralectotype 3: H = 19.2, DM = 8.74, Hap = 9.92, Dap = 6.05; paralectotype 4: H = 22.92, DM = 9.15, Hap = 10.79, Dap = 6.68.

Peronaeus (Lissoacme) puntanus: holotype, MACN-In 9917, paratypes, MACN-In 9917-1 (70), MACN-In 1316 (10), MACN-In 9834a (5).

Distribution: Argentina, *San Luis Prov.*, Coronel Pringles Dept., Carolina (MACN-In 28800), Cerro Sololasta (MACN-In 9834, MLP 9671), General Pedernera Dept., Cerro del Morro (MACN-In 9917, MACN-In 9917-1, MACN-In 1316), La Capital Dept., Cerro Varela (MACN-In 1517, IFML 15582), San Martín Dept., quebrada between Quines and Libertador San Martín (IFML 15573).

Bostryx reedi
(Parodiz, 1947)
Fig. 1G

Peronaeus (Lissoacme) reedi Parodiz, 1947: 10; – Parodiz, 1957b: 24; 1961: 61; Fernández, 1973a: 95.

Bostryx reedi – Breure, 1979: 57; Miquel, 1993: 162, pl. 1, fig. 6, pl. 2, fig. 15.

Type Locality: “La Cueva, [no Las Cuevas], provincia de Mendoza, Argentina”.

Type Material: holotype MACN-In 10001.

Distribution: Argentina, *Mendoza Prov.*, La Cueva (MACN-In 10001, MACN-In 10001-1 A), Las Heras Dept., Cerro Pelado (MCNL 1116, MACN-In 9592-1 A), Guamparito (MACN-In 10001).

Bostryx rudisculptus
(Parodiz, 1956)
Fig. 1H

Bulimulus (Scansicochlea) rudisculptus Parodiz, 1956b: 78, fig. 7; – Fernández, 1973a: 85.

Bostryx rudisculptus – Breure, 1979: 58.

Bostryx tortoranus – Miquel, 1995: 123 [partim].

Type Locality: "Baños de Villavil, provincia de Catamarca". The location of the type locality is within Belén Dept. in Catamarca, Argentina.

Type Material: holotype MACN-In 380; paratypes MACN-In 380 (5).

Distribution: Argentina, *Catamarca Prov.*, Belén Dept., Baños de Villavil (MACN-In 380, MACN-In 380-1, MLP 10171).

Remarks

Bostryx rudisculptus is a species originally described in *Bulimulus* by Parodiz (1956b). Later, the Parodiz (1957) did not listed *Bulimulus* (*Scansicochlea*) *rudisculptus* as a species present in Argentina. Fernandez (1973) mentioned that *B. rudisculptus* is distributed in Catamarca province.

Bostryx stelzneri (Dohrn, 1875)

Bulimulus (*Scutalus*) *stelzneri* Dohrn, 1875: 202; 1877: 157; Doering, 1879: 66; Holmberg, 1912a: 23.

Bulimus (*Scutalus*) *Stelzneri* – Doering, 1875a [1877]: 339.

Bulimulus stelzneri – Pfeiffer, 1876: 58; Kobelt, 1878: 149, pl. 6, fig. 7.

Bulimulus (*Scutalus*) *conispurus* Doering, 1879: 67.

Bulimulus (*Scutalus*) *conispurus fasciata* Doering, 1879: 67.

Bulimulus (*Bostryx-Lissoacme*) *conospirus* – Pilsbry, 1896: 189 [incorrect subsequent spelling].

Bulimulus (*Bostryx-Lissoacme*) *stelzneri* – Pilsbry, 1896: 190, pl. 51, figs. 20–22.

Bulimulus (*Thaumastus*) *hector* Holmberg, 1909a: 11; 1912b: 149.

Bulimulus hector var. *cora* Holmberg, 1909a: 12.

Bulimulus hector var. *helenae* Holmberg, 1909a: 12.

Bulimulus hector var. *giovanni* Holmberg, 1909a: 12.

Bulimulus hector var. *montana* Holmberg, 1909a: 12.

Bulimulus hector var. *cactorum* Holmberg, 1909a: 12.

Bulimulus stelzneri hector – Hylton Scott, 1945: 204.

Neopetraeus stelzneri – Parodiz, 1946b: 315, fig. 5, pl. 3, figs. 1–12; 1948: 7; 1957a: 134; Zilch, 1971: 198; Fernández, 1973a: 106.

Neopetraeus stelzneri apertus Hylton Scott, 1948a: 238; Parodiz, 1957a: 135; Fernández, 1973a: 109.

Neopetraeus stelzneri f. *hybrida* Parodiz, 1948: 12, pl. 3, fig. 11; – Fernández, 1973a: 107.

Neopetraeus stelzneri f. *nonogastanus* Parodiz, 1948: 13, pl. 3, fig. 1; – Fernández, 1973a: 107.

Neopetraeus stelzneri f. *tinogastanus* Parodiz, 1948: 13; – Fernández, 1973a: 108.

Neopetraeus stelzneri peristomatus f. *paraconispurus* Parodiz, 1948: 16; – Fernández, 1973a: 112.

Neopetraeus stelzneri var. *conispurus* – Parodiz, 1948: 16.

Neopetraeus stelzneri var. *hector* – Parodiz, 1948: 18.

Neopetraeus stelzneri conispurus f. *minuta* Parodiz, 1948: 18; – Fernández, 1973a: 110.

Neopetraeus stelzneri hector – Parodiz, 1957a: 135; Fernández, 1973a: 110.

Neopetraeus stelzneri conispurus – Parodiz, 1957a: 134; Fernández, 1973a: 109.

Neopetraeus stelzneri hector f. *multicincta* – Parodiz, 1948: 20; Fernández, 1973a: 110.

Neopetraeus stelzneri hector f. *tricincta* – Fernández, 1973a: 111.

Bostryx stelzneri apertus – Breure, 1979: 51.

Bostryx conispurus – Breure, 1979: 52.

Bostryx hector – Breure, 1979: 54.

Bostryx stelzneri nonogastanus – Breure, 1979: 56.

Bostryx stelzneri tinogastanus – Breure, 1979: 59.

Bostryx stelzneri – Breure, 1978: 127, figs. 191–199; 1979: 58; Miquel, 1993: 163, pl. 1, figs. 9, 10, 12, pl. 2, figs. 13, 14 [partim].

Type Locality: "Cerro de Chepe". Cerro Chepe is located in Argentina, La Rioja Prov., Rosario Vera Peñaloza Dept.

Type Material: Not located.

Neopetraeus stelzneri apertus: holotype, MLP 11292, paratype, MACN-In 26645 (1);

Neopetraeus stelzneri conispurus f. *minuta*: holotype, MACN-In 6243, paratypes, MACN-In 6243-1 (26), MLP 1298 (1);

Neopetraeus stelzneri hybrid: holotype, MACN-In 433; paratypes, MACN-In 433-1 (45), MLP 1303 (2);

Neopetraeus stelzneri f. *nonogastanus*: holotype, MACN-In 17591, paratypes, MACN-In 17591-1 (10), MACN-In 17613 (10);

Neopetraeus stelzneri peristomatus f. *paraconispurus*: holotype, MACN-In 14086, paratypes, MACN-In 14086-1 (7);

Neopetraeus stelzneri f. *tinogastanus*: holotype, MACN-In 19061, paratypes, MACN-In 19061-1 (6).

Distribution: Bolivia; Argentina, *Catamarca Prov.*, Ambato Dept., Sierra de Ambato (MACN-In 9682, MLP 9538), Andalgalá Dept., Agua de Las Palomas (IFML 15591), Cuesta de Andalgalá (MLP 9529, MLP 9533), Quebrada de Arenal (MACN-In 17850); Belén Dept., Cuesta de Belén (IFML 15526, MACN-In 21116 A, MLP 9531, MLP 9536), Cuesta el Tambillo (IFML 11018), Hualfín (IFML 14925), Quebrada de Indalecio (IFML 15461 A), Villa Vil (MACN-In 382, MLP 9518); Capayán Dept., Chumbicha (MACN-In 9229 A), Concepción (MACN-In 9227, MACN-In 17777 A); Esquiú Dept., Las Pirquitas dam (IFML 15459 A); Santa María Dept., El Desmonte (IFML 14447); Tinogasta Dept. (IFML 11002, IFML 11020), Cuesta de La Chilca (IFML 15592, IFML 15594, IFML 1616, IFML 11019, IFML 78, IFML 14443, IFML 15283, IFML 15473 A, IFML 15474 A, IFML 15475 A, IFML 15593); Cuesta de Zapata (MLP 803, IFML 10896, IFML 14446, IFML 15527, IFML 15515, IFML 15460 A), La Coipita (MACN-In 19061, MACN-In 19061-1), Santa Rosa (MLP 9515), Sierra de Fiambalá (MACN-In 19619, MLP 1298). *Cordoba Prov.*, Cruz del Eje Dept., Aguas de Ramón (MACN-In 32849 A). *Jujuy Prov.* (IFML 506), Dr. Manuel Belgrano Dept., before of Quebrada de Humahuaca (IFML 15481 A), Humahuaca Dept., Coctaca (MACN-In 2466 A, MLP 9527), Maimará (MACN-In 19590), Quebrada de Humahuaca (MACN-In 586 A, MACN-In 35642, MACN-In 19506 A, IFML 15469 A, MLP 9523), Río Humahuaca (MACN-In 19460), Uquía (MACN-In 8838 A, MACN-In 12335 A); Santa Bárbara Dept., Puesto Viejo (MACN-In 988); Tilcara Dept. (IFML 15585, IFML 984, MLP 1299, MLP 9522, MLP 9519, MLP 9524, MACN-In 586 A, MACN-In 1629), Cerro Negro (IFML 14878, IFML 15468 A, IFML 15516, IFML 16467 A, MACN-In 1636 A), Cerro Pucará (MACN-In 30615, MACN-In 30618 A, MACN-In 19506 A, MACN-In 19525 A, MACN-In 13285 A), Garganta del Diablo (IFML 5584, IFML 560, IFML 15466 A, IFML 15518), Huacalera (IFML 10449, IFML 15482 A, IFML 15589), Sierra de Tilcara (IFML 410); Tumbaya Dept. (IFML 15583, IFML 15587, IFML 15470 A, MACN-In 30597 A), Quebrada de Purmamarca (MLP 9517), Volcán (MACN-In 24308 A). *La Rioja Prov.* (IFML 15590, MACN-In 19946), Arauco Dept., Aimogasta (MACN-In 7810 A, MACN-In 24398 A); Castro Barros Dept., Chuquis (MLP 9534), Coronel Felipe Varela Dept., Cuesta de Miranda (MACN-In 434, MACN-In 30441), Sierra de Velázquez (IFML 15456

A); Chilecito Dept. (IFML 11000, IFML 11001, IFML 15513, MLP 9539), Nonogasta (MACN-In 17613, MACN-In 17591 A), Sañogasta (IFML 467, IFML 12764); Famatina Dept. (MACN-In 17849 A, IFML 15514, IFML 15458 A); General Belgrano Dept., Iliar (MACN-In 18356 A), Olta (MACN-In 18325, MLP 1300); Independencia Dept., El Chiflón (MLP 9514), La Torre (IFML 11045, IFML 15586), Patquia (MLP 9535); Sanagasta Dept. (MLP 9521), Quebrada de Los Sauces (MACN-In 15703 A, IFML 15457 A), Quebrada de Sanagasta (MACN-In 9852); San Blas de los Sauces Dept., Cerro de Velazco (MLP 1303, MACN-In 433, MACN-In 433-1). *Salta Prov.* (MACN 17597 A), Chicoana Dept., Quebrada de Agua Negra (MLP 2393); Guachipas Dept. (MACN-In 17595), Alemanía (MACN-In 582 A, MACN-In 17596, MACN-In 17597, MLP 1535, MLP 1545); La Viña Dept., Quebrada de Guachipas (MACN-In 3218); Metán Dept., Cerro Colorado (MACN-In 32861, MACN-In 36890, MACN-In 26522, MACN-In 26229, MLP 9528), Dique Cabra Corral (IFML 15544 A, IFML 15545 A, IFML 15543 A), Pala Pala (IFML 15492 A); Rosario de la Frontera Dept. (MLP 1307); Rosario de Lerma Dept. (IFML 15463 A), between Alfarcio and Santa Rosa de Tastil (IFML 15464 A), El Golgota (IFML 15588, IFML 14072), Ruinas de Santa Rosa de Tastil (IFML 15455 A). *San Juan Prov.*, Jáchal Dept., Cerro Agua Negra (MACN-In 24305), Ciénaga (MACN-In 10655); Zonda Dept., Cerro Negro (MACN-In 9920). *San Luis Prov.* (MACN-In 15711), Ayacucho Dept., Luján (MACN-In 9834), Santo Domingo (MLP 9516-1), Sierra de Quines (MACN-In 15122); Belgrano Dept., Sierra Gigante (MACN-In 14086, IFML 14086-1); Coronel Pringles Dept., La Toma (MACN-In 1018 A), Las Cañas (MACN-In 2426); Libertador General San Martín Dept., Quebrada entre Quines y Libertador San Martín (IFML 15462 A). *Tucuman Prov.* (MACN-In 9159, IFML 10505), Tafí del Valle Dept. (IFML 71), Amaicha del Valle (MLP 1542), Ruinas de Quilmes (IFML 15465 A), Tafí Viejo Dept., Las Arquitas (MACN-In 10505).

Remarks

Bostryx stelzneri is characterized by its shell polymorphism and a very wide geographical distribution in Argentina. Due to its high shell variability, several *varieties* and *forms* have been described by different authors for this species, *Bostryx stelzneri stelzneri* (Dohrn, 1875),

Bostryx stelzneri peristomatus (Doering, 1879), *Bostryx stelzneri conispirus* (Doering, 1879), *Bostryx stelzneri hector* (Holmberg, 1909), *Bostryx stelzneri apertus* (Hylton Scott, 1948), *Bostryx stelzneri hybrida* (Parodiz, 1948), *Bostryx stelzneri nonogastanus* (Parodiz, 1948), *Bostryx stelzneri tinogastanus* (Parodiz, 1948) and *Bostryx stelzneri scaber* (Parodiz, 1948) (Fig. 1I). *Bulimulus hector* Holmberg, 1909, *Bulimulus (Scutalus) peristomatus* Doering, 1879 and *Bulimulus (Scutalus) conispirus* Doering, 1879 were originally described with the status of species, but later considered as varieties of *B. stelzneri* by Parodiz (1948). Here, we cited *Bostryx stelzneri sensu lato* including all subspecies described awaiting a taxonomic revision of this species complex.

Bostryx strobeli
(Parodiz, 1956)
Fig. 1J

Bulimulus (Scansicochlea) strobeli Parodiz, 1956a: 62; – Fernández, 1973a: 85.

Bulimulus (Scansicochlea) lolae Hylton Scott, 1967b: 11.

Bostryx lolae – Breure, 1979: 55.

Bostryx strobeli – Breure, 1979: 58; Miquel, 1995: 122, pl. 1, figs. 7, 8.

Type Locality: “Cerro del Morro, provincia de San Luis”. The type locality is located in the General Pedernera Dept, San Luis province.

Type Material: holotype MACN-In 9916; paratypes MACN-In 9916-1 (4), MLP 11018 (2). *Bulimulus (Scansicochlea) lolae*: paratypes MACN-In 27283 (1), MLP 11010 (1), MLP 11009 (1).

Distribution: Argentina, *Cordoba Prov.*, Calamuchita Dept., Santa Rosa de Calamuchita (MACN-In 27283, MLP 11009, MLP 11010). *San Luis Prov.*, General Pedernera Dept., Cerro del Morro (MACN-In 9916, MACN-In 9916-1, MLP 11018, MLP 11449); Libertador General San Martín Dept., Cerro Inti Huasi (MLP 895).

Bostryx torallyi
(d’Orbigny, 1835)

Helix torallii d’Orbigny, 1835: 11.

Bulimulus montagnei d’Orbigny, 1837 [1834–1847]: pl. 32, figs. 5–7; 1838: 286; – Parodiz, 1946b: 322, fig. 8.

Bulimus montagnei – Gray, 1854: 17; Reeve, 1849: pl. 23, fig. 146.

Bulimus torallyi – d’Orbigny, 1837 [1834–1847]: 285, pl. 32, figs. 1–4; Gray, 1854: 17.

Bulimus draparnaudi Pfeiffer, 1846b: 113.

Bulimus (Mesembrinus) Torallyi – Parravicini, 1894: 5.

Bulimulus toralyis – Ancey, 1897: 5 [incorrect subsequent spelling].

Drymaeus torallyi – Pilsbry, 1898: 278, pl. 44, figs. 97–99, 1–3; Zischka, 1953: 82.

Bulimulus (Drymaeus) nigroumbilicatus Preston, 1907: 491, fig. 6.

Bulimulus thorallyi – Holmberg, 1909c: 91; Breure, 1975: 1146, pl. 8, fig. 4 [incorrect subsequent spelling].

Bulimulus (Mesembrinus) climacographus Holmberg, 1912b: 147, figs. 1, 2.

Peronaeus (Lissoacme) climacographus – Parodiz, 1946b: 315, pl. 2, fig. 7; 1947: 15.

Peronaeus (Lissoacme) torallyi – Parodiz, 1946b: 315, 322, fig. 10, pl. 1, fig. 1; 1947: 16; Fernández, 1973a: 95.

Peronaeus (Lissoacme) birabeni Hylton Scott, 1948b: 272, figs. 4–10.

Peronaeus (Lissoacme) torallyi avus Parodiz, 1947: 20; – Parodiz, 1957b: 23; Fernández, 1973a: 96.

Peronaeus (Lissoacme) torallyi corrugatus Parodiz, 1947: 19; – Parodiz, 1957b: 23; Fernández, 1973a: 96.

Peronaeus (Lissoacme) torallyi draparnaudi Parodiz, 1947: 18; – Parodiz, 1957b: 23; Fernández, 1973a: 97; Quintana, 1982: 92.

Peronaeus (Lissoacme) torallyi nigroumbilicatus Parodiz, 1947: 20; – Parodiz, 1957b: 23; 1962: 449; Fernández, 1973a: 97; Quintana, 1982: 93.

Drymaeus draparnaudi – Breure, 1975: 1159.

Bostryx climacographus – Breure, 1978: 60, fig. 79; 1979: 52.

Bostryx torallyi – Breure, 1979: 59; Miquel, 1995: 122, pl. 1, figs. 9–11.

Peronaeus (Lissoacme) torallyi torallyi – Quintana, 1982: 92.

Bostryx birabeni – Neubert & Janssen, 2004: 202, pl. 6, fig. 69 [non Hylton Scott, 1948].

Type Locality: “provincia Valle-Grande (republica Boliviana)”. In 1837 [1834–1847] d’Orbigny increased the information concerning the type locality of this species detailing that: “Nos avons rencontré le Bulime de Torally sur les cotaux escarpés et sees du Rio Grande dans les provinces de la Laguna et de Valle Grande ... Cordillères boliviennes” “Cette espèce abonde, surtout, au lieu nommé Pampa Ruiz”.

Type Material: lectotype MNHN 23251; paralectotypes MNHN 23252 (3), MNHN 23253 (3), MNHN 23254 (1), MNHN 23255 (5), SMF 171805 (1).

Peronaeus (Lissoacme) birabeni: holotype, MLP 11329, paratypes, MACN-In 32639 (1), MACN-In 6969 (2); *Peronaeus (Lissoacme) torallyi avus*: holotype, MACN-In 3236, paratypes, MACN-In 3236-1 (3); *Peronaeus (Lissoacme) torallyi corrugatus*: holotype, MACN-In 25987, paratypes, MACN-In 25987-1 (10); *Peronaeus (Lissoacme) torallyi nigroumbilicatus*: holotype, MACN-In 8848, paratypes MACN-In 8848-1 (14); *Bulimulus (Mesembrinus) climacographus*: holotype, MACN-In 1349, paratype, MACN-In 1349-1 (1); *Bulimulus montagnei*: syntypes NHMUK 1854.12.4.194 (8).

Distribution: Bolivia; Paraguay; Perú; Argentina, Chaco Prov., Almirante Brown Dept., Taco Pozo (IFML 10526). Jujuy Prov. (IFML 588, MLP 9575), Ledesma Dept. (IFML 15500 A, IFML 15525), Urundel (IFML 903), Santa Bárbara Dept., Puesto Viejo (MACN-In 986). Salta Prov. (MLP 9676, MLP 9968, IFML 15598, IFML 15599); Anta Dept., Cañada de los Colorados (MACN-In 367), Quebrachal (MACN-In 19167, MLP 9680); Cachi Dept. (MACN-In 3236, MACN-In 3236-1); General Güemes Dept. (MACN-In 36937 A), Cerro Pelado (IFML 387), Las Mesitas (IFML 15603); General José de San Martín Dept., Embarcación (MLP 11329, MLP 11330, MLP 11331, MLP 11332, IFML 15604, MACN-In 8848, MACN-In 8848-1, MACN-In 32639, MACN-In 6969, MACN-In 32645, IFML 120, IFML 12759, IFML 12757, IFML 855), near Tartagal (IFML 15602); La Candelaria Dept., Quebrada del Río Ceibal (IFML 15596), Santa Bárbara (IFML 122); Metán Dept., between Lumbrera and Juramento (IFML 579), Cerro Colorado (MACN-In 26230, MACN-In 26231, MACN-In 26518, IFML 15597, MLP 9667, MLP 9966, MLP 9681), Lumbrera (IFML 876, IFML 15498 A, IFML 15600), route to Dique Cabra Corral (IFML 15497 A, IFML 15499 A, IFML 15547 A, IFML 15548, IFML 15549, IFML 15575, IFML 15576, IFML 15577, IFML 15578, IFML 15579). Santiago del Estero Prov., Pellegrini Dept., Cerro del Remate (IFML 132). Tucuman Prov. (IFML 11305), Burruyacu Dept., Río Nío (IFML 10933); Juan Bautista Alberdi Dept., Escaba (IFML 15523, IFML 15524, IFML 15496 A); La Cocha Dept., Dique San Ignacio (IFML 11302); Lules Dept., Villa Nougues (MACN-In 18363, MACN-In 25987, MACN-In 25987-1,

MLP 9679); Tafí Viejo Dept., El Cadillal (MLP 9659); Trancas Dept., Arroyo India Muerta (IFML 15605, IFML 974, IFML 15494 A, IFML 15493 A, IFML 15495 A, IFML 15528), Tapia (IFML 15522, MACN-In 1349, MACN-In 1349-1, MACN-In 9837, MACN-In 23049), Vipos (IFML 160, IFML 191, MACN-In 18319, MACN-In 17594, MACN-In 17578, MACN-In 21475, IFML 15606, MLP 9678).

Remarks

Bostryx torallyi was originally described by d'Orbigny (1835) in the genus *Helix* Linnaeus, 1758. Subsequently classified in *Bulimus* by d'Orbigny (1837, 1838 [1834–1847]), in *Bulimulus* Leach, 1814, by Parravicini (1894) and in *Drymaeus* Albers, 1850, by Pilsbry (1897–1898) on the grounds of shell characters. Breure (1979) and Miquel (1995) relocated *B. torallyi* in *Bostryx*. This species shows high shell variability in form and coloration and mainly for this reason three subspecies have been described by Parodiz (1947), *Peronaeus (Lissoacme) torallyi corrugatus*, *Peronaeus (Lissoacme) torallyi avus* and *Peronaeus (Lissoacme) torallyi nigroumbilicatus*.

Miquel (1995) synonymized all Parodiz subspecies.

Bostryx tortoranus (Doering, 1879)

Bulimulus (Bulimulus) tortoranus Doering, 1879: 71.

Bulimulus (Bostryx-Lissoacme) tortoranus – Pilsbry, 1896: 192.

Bulimulus jujuyensis Holmberg, 1909a: 11; – Holmberg, 1912b: 149; Hylton Scott, 1945: 207, fig. 236; Parodiz, 1946b: 315; 1957a: 134; 1962: 434; Breure, 1978: 144.

Peronaeus (Lissoacme) tortoranus – Parodiz, 1946b: 315; 1947: 12; 1957b: 23; Fernández, 1973a: 98.

Bulimulus (Scansicochlea) hyltonscottae Parodiz, 1956a: 59, figs. 1–5.

Bulimulus (Scansicochlea) martinezi Hylton Scott, 1965: 25.

Bulimulus (Scansicochlea) cicheroi Hylton Scott, 1967b: 7.

Bulimulus (Scansicochlea) gladysae Hylton Scott, 1967b: 8.

Bostryx martinezi – Breure, 1978: 100, figs. 148–149.

Bostryx cicheroi – Breure, 1979: 52.

Bostryx gladysae – Breure, 1979: 54.

Bostryx hyltonscottae – Breure, 1979: 54.

Bostryx tortoranus – Breure, 1979: 59; Miquel, 1995: 123, pl. 1, figs. 12–17.

Type Locality: "...quebradas húmedas de la sierra de Pocho (Totoras, Yatan, Cerro Salado)". The mountain system "sierra de Pocho" is located in Cordoba Prov., Pocho Dept.

Type Material: Not located.

Bulimulus (Scansicochlea) gladysae: holotype, MLP 13345, paratypes, MLP 11007 (1), MLP 11442 (1), MLP 11006 (1), MLP 11444 (1), MLP 11443 (1), MACN-In 27282 (4); *Bulimulus (Scansicochlea) hyltonscottae*: holotype, MACN-In 6516, paratypes, MACN-In 6516-1 (4); *Bulimulus (Scansicochlea) cicheroi*: holotype, MLP 10996, paratypes, MLP 10995 (1), MLP 10997 (1), MACN-In 27281 (1); *Bulimulus (Scansicochlea) martinezi*: holotype, MLP 11448, paratypes, MACN-In 27208 (3), MLP 11011 (1), MLP 11012 (1), MLP 11446 (1), MLP 11447 (1); *Bulimulus jujuyensis*: holotype, MACN-In 32686; *Bulimulus (Bulimulus) monticola*: syntypes ZMB 34734 (2).

Distribution: Argentina, *Catamarca Prov.* (MLP 11442, MLP 11443; MLP 11444, MLP 13345, MLP 11006, MLP 11006), Andalgalá Dept., Cuesta de la Chilca (MLP 11442, MLP 11444, MLP 11443, MLP 11445, MLP 11006, MLP 11007, MLP 13345, MACN-In 27282). *Cordoba Prov.* (MLP 9670), Pocho Dept., Chancani (MLP 8080, MLP 8081, MLP 11447, MLP 11012), between Las Palmas and Chancani (IFML 15608, IFML 15611, IFML 15610, IFML 15609, MACN-In 27208, MACN-In 27431, MACN-In 36892 A, MLP 10169, MLP 10170, MLP 11448, MLP 11011, MLP 11012, MLP 11446, MLP 11447), between Las Palmas and El Cadillo (IFML 15506 A, IFML 15507 A, IFML 15508 A). *Jujuy Prov.* (MLP 1534, MLP 8076, MLP 8077), Ledesma Dept., Fraile Pintado (MLP 8071); Tilcara Dept. (MACN-In 19506, MACN-In 19507, MACN-In 32686, MLP 8070, MLP 8075, MLP 1256-1, MLP 1526-1); Cerro Negro (IFML 14877 A, IFML 15530, IFML 15001 A, IFML 15574 A), route from Tilcara to Garganta del Diablo (IFML 158, IFML 15607); Tumbaya Dept. (MLP 8078). *Salta Prov.*, Cachi Dept. (IFML 15505 A, IFML 15612); Cafayate Dept. (IFML 15248). *San Luis Prov.*, Ayacucho Dept., Luján (MACN-In 3235), El Zapallar (MACN-In 6516, MACN-In 6516-1), Junín Dept., Quebrada de Cautana (MLP 10996, MLP 10997, MACN-In 27281). *Tucuman Prov.*, Tafí del Valle Dept. (IFML 15282, IFML 15510 A), between Amaicha

and El Infiernillo (IFML 15281 A, IFML 15502 A, IFML 15503 A), Ruinas de Quilmes (IFML 15504 A).

Remarks

In 1995, Miquel sustained that *B. monticola* (= *B. sophiae*), *B. jujuyensis*, *B. sporadicus gracilis*, *B. hyltonscottae*, *B. rudisculptus*, *B. martinezi*, *B. cicheroi* and *B. gladysae*, are variations of *B. tortoranus* and synonymized them all based on the study of shell characters.

Type material and specimens from different localities of occurrences of this species were examined in the present study. *Bulimulus jujuyensis*, *B. hyltonscottae*, *B. gladysae*, *B. martinezi* and *B. cicheroi* have same shell characters and measurement than *B. tortoranus* thus are synonymized under *B. tortoranus*. However, *B. sophiae*, *B. sporadicus gracilis* and *B. rudisculptus* are different species from *B. tortoranus* and can be clearly differentiated by their shell shape and size.

Bostryx willinki

Weyrauch, 1964

Bostryx (Bostryx) willinki Weyrauch, 1964: 54, fig. 12; – Fernández, 1973a: 98.

Bostryx willinki – Breure, 1979: 60; Miquel, 1993: 164, pl. 1, figs. 7, 8.

Type Locality: "Argentina, prov. Catamarca, quebrada de Tinogasta".

Type Material: holotype IFML 121a; paratypes IFML 121 (3).

Distribution: Argentina, *Catamarca Prov.*, Tinogasta Dept. (IFML 121, MACN-In 19062).

Genus *Bulimulus*

Leach, 1814

Type Species: *Helix exilis* Gmelin, 1791 [original designation].

Geographic Distribution: Mexico, West Indies, Venezuela, Guyana, Surinam, French Guiana, Colombia, Panama, Costa Rica, Nicaragua, Guatemala, Belize, Brazil, Paraguay, Uruguay, Argentina, Bolivia, Peru, Ecuador.

Remarks

Fernández (1973) cited *Bulimulus gorritiensis* as a species distributed in Argentina, although

she did not state any specific locality of occurrence. After revision of all material deposited in the main Argentinean malacological collections, we did not find any historical or recently collected material of this species. Parodiz (1957a) and Miquel (1991) mentioned that *Bulimulus gorritiensis* only inhabits Uruguay. For this reason, we have not listed *B. gorritiensis* in this catalogue.

Bulimulus apodemetes
(d'Orbigny, 1835)

Helix (Cochlogena) apodemetes d'Orbigny, 1835: 10.

Bulimulus apodemetes – d'Orbigny, 1837 [1834–1847]: pl. 30, figs. 5–8; 1838: 279; Döhring, 1879: 68; Parravicini, 1894: 6; Ancey, 1897: 5; Breure, 1978: 141, fig. 231; Miquel, 1991: 93, figs. 12–19, 45–46.

Bulimulus pessulatus Reeve, 1849: pl. 23, fig. 153.

Bulimulus (Bostryx-Lissoacme) apodemetes – Pilsbry, 1898: 187, pl. 54, figs. 1–4.

Bulimulus (Scutalus) riojanus Holmberg, 1912a: 23.

Bulimulus (Bulimulus) apodemetes – Parodiz, 1946b: 315, 318, fig. 2, pl. 2, fig. 1; Fernández, 1973a: 74; Breure, 1975: 1145; Quintana, 1982: 87.

Bulimulus apodemetes dispar Hylton Scott, 1952: 23, pl. 1, fig. 5; – Parodiz, 1957a: 134.

Bulimulus moei Parodiz, 1962: 431.

Type Locality: “republica Argentina; republica Boliviana”. In 1837 (1834–1847) d'Orbigny increased the information concerning to the type locality of this species detailing that *Bulimulus apodemetes* was found over “sur les coteaux du Parana, province d'Entre-rios, près de Feliciano au 31° degré de latitude sud ...”, “... près du convent de San-Lorenzo, province de Santa-Fe ...”, “... provinces de Valle grande et de la Laguna ...”.

Type Material: syntypes MNHN 24664 (4), Bolivia; MNHN 24663 (6), Bolivia, Pampa Grande; MNHN 24662 (4), Bolivia, Vilma.

Bulimulus pessulatus: syntypes NHMUK 1975313 (3), Bolivia; *Bulimulus apodemetes dispar*: paratype IFML 736 (1).

Distribution: Bolivia; Paraguay; Uruguay; Argentina, *Catamarca Prov.* (MLP 909, IFML 11054), *Ambato Dept.* (MACN-In 482); *Andalgalá Dept.* (IFML 202); *Belén Dept.* (IFML 774); *Fray Mamerto Esquiú Dept.*, *Las Pirqui-*

tas dam (MLP 8037); *El Alto Dept.* (IFML 567); *Paclín Dept.* (IFML 843). *Chaco Prov.*, *Añatuya* (MACN-In 12124); *Chacabuco Dept.*, *Charata* (MACN-In 17155), *Gancedo* (MACN-In 14524, MACN-In 13967). *Cordoba Prov.* (MLP 8014, MLP 32012, MLP 912, MLP 32005, MLP 8006, MLP 32004, MLP 8034, MLP 32017, MLP 8015, IFML 15648, IFML 15646, IFML 15644), *Calamuchita Dept.* (MLP 8028, MACN-In 3222, IFML 15650), *Río Tercero* (MLP 8010, MLP 8011, MACN-In 1871); *Colón Dept.*, (IFML 15647), *Cabana* (MLP 8038, MLP 907, MLP 10185-6), *Jesús María* (MLP 8036, 908, IFML 15649), *Unquillo* (MACN-In 30166); *Cruz del Eje Dept.*, *San Gregorio* (MLP 8007); *Ischilín Dept.* (IFML 10987), *La Calera* (MACN-In 475); *Punilla Dept.*, *Capilla del Monte* (MACN-In 9228), *Concepción* (MACN-In 17776), *Gutemberg* (MLP 8002), *Cosquín* (MACN-In 1000, MACN-In 9863), *Lago San Roque* (MACN-In 10426, MACN-In 14523); *San Alberto Dept.*, *Villa Brochero* (MACN-In 13254), *Villa María* (MACN-In 30611); *Santa María Dept.*, *Alta Gracia* (MLP 6686-1, MACN-In 20682); *Totoral Dept.*, (MLP 910), *Los Mistoles* (MLP 32002), *Macha* (MLP 8000), *Sierra Chica* (IFML 9), *Río Seco* (MACN-In 31624), *Saldán* (MLP 6696-4); *San Javier Dept.* (MLP 1317, MLP 2362, MLP 32015, MACN-In 3213, MACN-In 30638, MACN-In 11750), *Pucará* (MACN-In 11760); *Tulumba Dept.*, *San José de La Dormida* (MLP 8023, MLP 8012). *Entre Ríos Prov.*, *Paraná Dept.*, (MLP 2330, MLP 32013), *Paranacito* (MACN-In 20080). *Formosa Prov.*, *Matacos Dept.*, *Ingeniero Juárez* (MLP 8040, MLP 8020, MLP 8019, MACN-In 26523, MACN-In 18611), *Santa Victoria Dept.* (MLP 8025). *Jujuy Prov.* (MLP 2349, MLP 8009, IFML 14926, IFML 904, IFML 594, IFML 854, MACN-In 1343), *Las Capillas* (MACN-In 36940); *Ledesma Dept.*, *Calilegua* (MLP 8027); *San Pedro Dept.* (MLP 923, IFML 921, IFML 2901, IFML 11303), *El Palmar* (MLP 10685-1), *El Quemado* (MACN-In 9099), *Higueritas* (MLP 8003), *La Mendieta* (MLP 8033), *Pampa Blanca* (MACN-In 8113), *Perico del Carmen* (MACN-In 8112), *Puesto Viejo* (MACN-In 578, MACN-In 987). *La Rioja Prov.*, *Sanagasta Dept.*, *Quebrada de los Sauces* (MACN-In 15704), *Quebrada de Sanagasta* (MACN-In 1350); *General Belgrano Dept.* (MACN-In 18359). *Salta Prov.* (MLP 8022, MLP 8001, MLP 8013, MLP 8017, MLP 8016, IFML 848, IFML 584, IFML 702, IFML 12754, IFML 15654, IFML 15636, IFML 15634), *Guachipas Dept.*, *Alemanía* (MLP 32001, MACN-In 581, MACN-In 17596), *Gen-*

eral Güemes Dept. (MLP 32021, IFML 887), Campo Santo (IFML 658); Capital Dept., City of Salta (MACN-In 3064, MACN-In 30641, MACN-In 8105, IFML 15641), San Bernardo (MLP 32009, MACN-In 14774); San Martín Dept., Embarcación (MLP 920, MACN-In 8848, MACN-In 9340), La Candelaria (IFML 529, IFML 15640), Pocitos (MLP 10994, MLP 10993, MLP 10992, MLP 10991, MLP 10990, MLP 10989), Tartagal (MLP 8005); Orán Dept. (MLP 8029, IFML 15639), Manuel Elordi (MLP 8018), Tabacal (MACN-In 36880), Urundel (MLP 8021), Vespucio (MLP 8031, MLP 32014); Metán Dept. (MLP 8030, MACN-In 8104, IFML 10726, IFML 453, IFML 174, IFML 578, IFML 814, IFML 15642, IFML 15643), Juramento river (IFML 11304); Rosario de la Frontera Dept. (MACN-In 6189, MACN-In 10016, IFML 15626, IFML 15621); Rosario de Lerma Dept. (IFML 15637); Santa Victoria Dept. (IFML 15638), Pampa Grande (MACN-In 1325). Santa Luis Prov., San Martín Dept., Las Cañas (MACN-In 2445), Piedra Blanca (MLP 32020, 1279), Quebrada de Cautana (MLP 8026), Quines (MLP 868), Rincón (MACN-In 18314). *Santiago del Estero Prov.* (IFML 813, MACN-In 19692), Lazaro (MLP 2312); Banda Dept., Negra Muerta (MLP 913); Juan Ibarra Dept., Melero (MLP 32007); Ojo de Agua Dept., Dulce river (MACN-In 307); Pelligrini Dept. (IFML 15645); Guasayán Dept., Sierra de Guasayán (MACN-In 12951, IFML 767); Moreno Dept., Tintina (MLP 8032); Sarmiento Dept., Villa Matará (MACN-In 18248), Santa Catalina (MACN-In 29951). *Tucuman Prov.* (MACN-In 21477, IFML 15622, IFML 15628, IFML 15625, IFML 927, 459), Burruyacu Dept., (IFML 93, 457, 10992, 10699, 12393, 11301), Sierra del Nogalito (IFML 824); Capital Dept. (IFML 15651, IFML 1879, MACN-In 10182, MACN-In 10442, MACN-In 9699); Cruz Alta Dept., Las Cejas (IFML 13524); La Cocha Dept. (IFML 898, 963), San Ignacio river (IFML 969); Leales Dept. (IFML 15625, IFML 11223); Lules Dept., Villa Nogués (MACN-In 309); Juan Bautista Alberdi Dept. (IFML 15623); Tafí Viejo Dept. (IFML 14273), El Cadillal (MACN-In 14040, MACN-In 9007, MACN-In 9914, IFML 241), San Javier (MACN-In 9860); Trancas Dept., (IFML 11224, 328, 14921, 14922, 14923), Tapia (MACN-In 1335, MACN-In 8086), Timbó (MLP 32018), On the way to Jardin (IFML 11306), On the way to Raco (IFML 803, IFML 15624), On the way to Tapia (IFML 11297, IFML 15627), on the way to Tapia- Vipos (IFML 475, IFML 15635).

Bulimulus bonariensis
(Rafinesque, 1833)

- Syphalomphix bonariensis* Rafinesque, 1833: 165.
Helix sporadica d'Orbigny, 1835: 12.
Bulimulus sporadicus – d'Orbigny, 1837 [1834–1847]: pl. 32, figs. 12–15; 1838: 271; Parravicini, 1894: 6; Ancey, 1897: 5; Formica Corsi, 1900: 48; Hylton Scott, 1948a: 236.
Bulimulus gelidus Reeve, 1849: pl. 74, fig. 553.
Bulimulus montevidensis Pfeiffer, 1846a: 33.
Bulimulus (Thaumastus) sporadicus var. *bonariensis* – Strobel, 1874: 24; Pilsbry, 1897: 68, pl. 11, figs. 11–18.
Bulimulus sporadicus var. *montevidensis* – Pilsbry, 1897: 68.
Bulimulus heloicus fusca Ancey, 1901: 82.
Bulimulus (Drymaeus) morenoi Preston, 1907: 494, fig. 7.
Bulimulus? bonaerensis Holmberg, 1909: 10.
Bulimulus saltensis Holmberg, 1909c: 92.
Bulimulus (Bulimulus) sporadicus schadei Schlesch, 1935: 86, pl. 6, figs. 4, 5.
Bulimulus jujuyensis – Hylton Scott, 1945: 207 [non Holmberg 1909]; Breure, 1978: 144, fig. 236.
Bulimulus (Bulimulus) sporadicus – Parodiz, 1946b: 315.
Bulimulus (Bulimulus) bonariensis – Fernández, 1973a: 75.
Bulimulus bonariensis bonariensis – Parodiz, 1962: 432; Scarabino, 2003: 208.
Bulimulus (Bulimulus) bonariensis bonariensis – Fernández & Castellanos, 1973b: 278; Miquel, 1991: 98, fig. 5.
Bulimulus (Bulimulus) bonariensis sporadicus – Fernández, 1973a: 76; Breure, 1975: 1145; 1978: 142.
Bulimulus (Thaumastus) sporadicus bonariensis – Breure, 1979: 62.
Bulimulus bonariensis sporadicus – Quintana, 1982: 87; Miquel, 1991: 101, figs. 39–42.

Type Locality: “Buenos Ayres in South America”. All species described by Rafinesque came from a collection from Buenos Aires with no other detail about localities.

Type Material: Not located.

Distribution: Uruguay; Argentina, *Buenos Aires Prov.* (MACN-In 11711, MACN-In 17851, MACN-In 9826, MACN-In 29959), Adrogué (MACN-In 7059), Berisso (MLP 1530, MLP

2945, MLP 8057), between Otamendi and Campana (MACN-In 11890), Escobar (MACN-In 14611, MACN-In 18352), Campana (MACN-In 288, MACN-In 9922), Campo de Mayo (MACN-In 37177), Ensenada (MLP 12724), Ezeiza airport (MACN-In 23544), Gonzales Catán (MACN-In 30630), Islas del Tigre (MACN-In 12334, 7112), Junín (MACN-In 36260), La Copeta (MACN-In 7058, MLP 8048, MLP 8049), La Matanza river (MACN-In 29955), La Plata (MLP 8060), Luján (MACN-In 14608, MACN-In 287, MLP 2315), Lujan river (MACN-In 9856, MACN-In 37523), Magdalena (MLP 1913), Martin Garcia Island (MACN-In 597, MACN-In 566, MACN-In 7112), Obligado (MACN-In 37522), Olivos (MACN-In 16436, MLP 12486, MLP 8042), Palermo (MACN-In 281), Pergamino (MACN-In 285, MLP 8045), Puan (MACN-In 289), Punta Lara (MACN-In 11832, 11886), San Isidro (MLP 8046), San Nicolás (MLP 8059), Sierras de Cura Malal (MACN-In 1328), Villa Lugano (MACN-In 282), Zárate (MACN-In 16726), Zelaya (MACN-In 14207, MACN-In 14746). Chaco Prov. Basail (MACN-In 36979). *Cor-doba Prov.*, Monte Maiz (MLP 8041), Capital Dept. (MLP 8051, 8054, 8053). Corrientes Prov., Capital Dept. (MLP 8055, MACN-In 1345). Entre Ríos Prov., Paraná river (MACN-In 290), Gualeguaychú Dept., Gualeguaychú (MACN-In 36980, MLP 8043), Paraná Dept. (MACN-In 37774). Formosa Prov., Laishi Dept., Reserva Ecológica El Bagual (MACN-In 37785). Misiones Prov. La Candelaria Dept. (MACN-In 35897), Wanda (MACN-In 37737). Santa Fé Prov., Castellanos Dept., Clucellas (MACN-In 37011); General Obligado Dept. (MLP 8056); San Cristobal Dept. (MACN-In 37010), La Rubia (MLP 8044); San Javier Dept. (MLP 8050); Vera Dept., Caraguatay (MLP 8047). *Tucuman Prov.*, Capital Dept., San Miguel de Tucuman (MACN-In 10442).

Remarks

Rafinesque (1833) briefly described *Syphalomphix bonariensis* with the type locality “Buenos Ayres” in South America; *Helix sporadica* was described by d’Orbigny (1835) with type locality “provincia Corrientes (republica Argentina) and provincia Chiquitensis (republica Boliviana)”. These species are synonyms, as previously stated by Miquel (1991). In 1837 *Helix sporadica* was reallocated to *Bulimulus* by d’Orbigny and subsequently considered as a species related to *Bulimulus bonariensis*.

Confusedly, *sporadicus* and *bonariensis* names have been used alternatively in the taxonomic identification of specimens mainly collected in Buenos Aires and northeastern Argentina.

Strobel (1874) stated that *B. (T.) sporadicus* var. *bonariensis* is a variety that has a uniform coloration and that this species has affinities with *B. tenuissimus* (Férussac) and *B. (Mesembrinus) oreades* d’Orbigny. Parravicini (1894) stated that *B. sporadicus* is a species variable in shape but not in coloration and in shell whorl numbers. According to Pilsbry (1897–1898), typical *sporadicus* of d’Orbigny was restricted by Peiffer stating that has a shell brownish or whitish with brown longitudinal streaks. *Bulimulus bonariensis sporadicus* (d’Orbigny) is difficult to distinguish from *B. b. bonariensis* because they both share shell characters, similar external morphology, great coloration variability and have overlapping areas of distribution.

Bulimulus elatior
Hylton Scott, 1952
Fig. 1L

Bulimulus elatior Hylton Scott, 1952: 21, pl. 2, fig. 4; – Breure, 1979: 62.

Bulimulus eliator – Parodiz, 1957a: 134; Fernández, 1973a: 78 [incorrect subsequent spelling].

Type Locality: “Laguna Yema, Formosa”.

Type Material: paratypes MLP 735 (2); IFML 735 (2).

Distribution: Argentina, *Chaco Prov.*, Almirante Brown Dept., Taco Pozo (IFML 166). *Formosa Prov.* (MLP 11002, MLP 10999, MLP 11004, MLP 11003, MLP 11001, MLP 11000). *Tucuman Prov.*, Leales Dept., Estación Araoz (IFML 12860).

Remarks

The name *elatior* is the eugraph (“correct spelling”) of the name (Art. 32.2 of the Code).

Bulimulus fourmiersi
(d’Orbigny, 1835)
[new combination]

Bulimus fourmiersi d’Orbigny, 1835: 273; – d’Orbigny, 1837 [1834–1847]: pl. 30, figs. 12–14; 1838: 273; Pilsbry, 1897: 71, pl. 11, figs. 26–28.

Bulimulus fourmiersi – Parodiz, 1946: 315.
Drymaeus fourmiersi – Fernández, 1973a: 113.
Thaumastus fourmiersi – Doering, 1879: 73.
 ?*Naesiotus fourmiersi* – Breure, 1979: 136
 [nomina inquirenda].

Type Locality: "...province de Corrientes, non loin du Rio de Santa-Lucia, au lieu nommé *Pasto reito*...".

Type Material: Not located.

Distribution: Argentina, *Entre Rios Prov.*, Sierra de Cordona (MACN-In 29941). *Santa Fe Prov.*, San Nicolás (MACN-In 6433). *Misiones Prov.*, Guaraní Dept., El Soberbio (IFML 910), Iguazú Dept. (MLP 8063).

Bulimulus gracilis
 Hylton Scott, 1948
 [new status]

Bulimulus sporadicus gracilis Hylton Scott, 1948a: 238.

Bulimulus bonariensis gracilis – Parodiz, 1957b: 133.

Bulimulus (Bulimulus) bonariensis gracilis – Fernández, 1973a: 77.

Bostryx tortoranus Miquel, 1993: 123 [partim].

Type Locality: no mentioned by the author in the original description. The original label of the type material says: "Cerro Colorado, S. E. Salta".

Type Material: holotype MLP 11015, paratypes MLP 11014 (4).

Distribution: Argentina, *Salta Prov.*, Metán Dept., Cerro Colorado (IFML 15655).

Remarks

B. gracilis was established as a subspecies of *Bulimulus sporadicus* by Hylton Scott. However, it is here considered as a distinct species by its shell characters and protoconch sculpture, which differ from *B. sporadicus* (d'Orbigny). In *B. gracilis*, shell surface is covered with wrinkles; protoconch sculpture with axial wrinkles, of regular thickness, spaced, slightly wavy at middle portion, crossed by spiral lines, very faint tight layout. Shell aperture is oval, longer than wide. Shell size in general larger than *B. sporadicus*.

Bulimulus prosopidis
 Holmberg, 1912
 Fig. 1M

Bulimulus (Mesembrinus) prosopidis Holmberg, 1912b: 148, figs. 3, 4.

Bulimulus (Bulimulus) prosopidis – Parodiz, 1946b: 315; 1957a: 134; Fernández, 1973a: 80; Quintana, 1982: 90.

Bulimulus prosopidis – Breure, 1978: 147, figs. 237–238, pl.7, figs. 14, 15, pl. 16, fig. 1; 1979: 62; Miquel, 1991: 103, figs. 1, 2.

Type Locality: "Ad marginem dextrum fluminis Pilcomayo...". The Pilcomayo River runs through the limits between Argentina (Formosa Prov.) and Paraguay, and as Holmberg's (1912b) publication is referred to Argentinean Bulimulinae, we sustain that the type locality of *Bulimulus prosopidis* is in Argentina. Holmberg also mentioned that this species is found in Bolivia in a similar environment.

Type Material: lectotype MACN-In1309, paralectotypes MACN-In1309-1 (2) [present designation]. Lectotype: H = 24.71, DM = 8.93, Hap = 9.80, Dap = 5.78.

Distribution: Paraguay; Bolivia; Argentina, *Formosa Prov.*, Pilcomayo River (MACN-In 1309, MACN-In 1310).

Bulimulus rushii
 Pilsbry, 1897

Bulimulus rushii Pilsbry, 1897a: 18; – Formica Corsi, 1900: 409; Parodiz, 1962: 433; Miquel, 1991: 103, figs. 3–4; Breure, 1979: 62; Scarbino, 2003: 208.

Bulimulus (Bulimulus) rushii – Pilsbry, 1897: 70, pl. 12 fig. 47; Parodiz, 1944: 3; 1946b: 306, pl. 1, fig. 3; Fernández, 1973a: 80.

Peronaeus (Lissoacme) curamalalensis Parodiz, 1957b: 23.

Type Locality: "Maldonado, Uruguay".

Type Material: lectotype ANSP 70382.

Distribution: Uruguay; Argentina, *Buenos Aires Prov.*, La Plata (MACN-In 29938, 29939). *Corrientes Prov.*, Sauce Dept. (MLP 8087, 8088, MACN-In 37036). *Entre Rios Prov.* (MACN-In 9898), Colón Dept. (MACN-In 29937); *Paraná Dept.* (MLP 1311, 12956).

Remarks

Part of the material collected in Entre Ríos (MACN-In 12956) is labeled as *Bulimulus durus* Spix, 1847, a species similar in shell morphology and protoconch sculpture to *B. rushii*. Simone (2006) classified *Bulimulus durus* in the genus *Rhinus* Albers, 1860. The mentioned lot at MACN-In is classified here as *B. rushii*, but the future availability of soft material of *Bulimulus durus* and *B. rushii* will improve our knowledge providing a more consistent conclusion on the status of these two species.

Bulimulus vesicalis
(Pfeiffer, 1853)

Bulimus vesicalis Pfeiffer, 1853: 58; – Breure, 1978: 149.

Bulimus fayssianus Petit, 1853: 250, pl. 8, fig. 7.

Bulimulus (Bulimulus) vesicalis vesicalis – Pilsbry, 1897: 69, pl. 12, fig. 42.

Bulimulus (Bulimulus) vesicalis – Parodiz, 1946b: 315.

Peronaeus (Lissoacme) fayssianus – Breure, 1975: 1141.

Discoleus fayssianus – Breure, 1979: 91.

Bulimulus vesicalis vesicalis – Miquel, 1991: 105, fig. 6.

Type Locality: “Brasilia”.

Type Material: lectotype NHMUK 1975395; paralectotypes NHMUK 1975396 (2).

Distribution: Brazil; Uruguay; Argentina, *Buenos Aires Prov.*, Punta Lara (MACN-In 37176). *Entre Rios Prov.*, Paraná Dept. (MLP 8183).

Remarks

According to Miquel (1991) this species is also distributed in Santa Fé Prov., but we were unable to find any lot of this species at main Argentinean museums. Both, Parodiz (1957a) and Fernández (1973) cited that *Bulimulus vesicalis uruguayanus* Pilsbry, 1897, is present in Argentina as a Pleistocene subfossil.

Genus *Drymaeus*
Albers, 1850

Type Species: *Helix hygrophylaea* d’Orbigny, 1835 [subsequent designation by Pilsbry, 1896–1897].

Geographic Distribution: Argentina, Bolivia, Uruguay, Brazil, Paraguay, Peru, Ecuador, Colombia, Venezuela, Panama, Costa Rica, Nicaragua, Honduras, Guatemala, Mexico.

Remarks

Drymaeus, according to Pilsbry, includes most species referred to *Mesembrinus*, *Eudiotus*, *Mormus*, *Hamadryas* and *Liostracus* by Albers (1850). Several subgenera have been proposed for *Drymaeus*, from which Argentinean species are usually classified into *Drymaeus (Drymaeus)* and *Drymaeus (Mesembrinus)*. However, according to Pilsbry (1901) “the passage of *Drymaeus* with expanded or reflexed peristome to *Mesembrinus* with simple and acute, is a gradual one, and many species are arbitrarily assigned to one or the other subgenus”. Moreover, he considered that *Mesembrinus* is not a natural group and this name should not be used. Breure (1979) listed the species composition for each subgenus and provided subgenera diagnoses that are not based on apomorphies. For this reason, species listed will not be classified into subgenera awaiting a genus revision to test the validity of subgeneric divisions.

Drymaeus abyssorum
(d’Orbigny, 1835)

Helix abyssorum d’Orbigny, 1835: 17; – d’Orbigny, 1837 [1834–1847]: pl. 39, figs. 7, 8; 1838: 308; Miquel, 1989: 79, fig. 1.

Bulimus (Bulimulus) abyssorum – Beck, 1837: 64.

Bulimus (Scutalus) abyssorum – Albers, 1850: 161.

Drymaeus (Drymaeus) abyssorum – Pilsbry, 1898: 192, pl. 37, figs. 3, 4; Parodiz, 1957b: 24; 1962: 439; Fernández, 1973a: 113.

Drymaeus (Drymaeus) abyssorum – Breure, 1979: 106.

Drymaeus abyssorum – Breure, 1975: 1149, pl. 7, fig. 2; Richardson, 1995: 95.

Type Locality: “provincia Lagunacensi (republica Boliviana)”. In 1837 (1834–1847), d’Orbigny added: “sur les rives du Rio grande, entre Valle Grande et les Pescado ... principalement au lieu nommé Pampa Ruiz”.

Type Material: lectotype MNHN 24660; paralectotypes MNHN 24661(4); NHMUK 1854.12.4.125 (5).

Distribution: Bolivia; Brazil; Argentina, *Jujuy Prov.*, Dr. Manuel Belgrano Dept., Lozano (IFML 15660), Yala (IFML 15708). *Salta Prov.*, Corniza road from Salta to Jujuy (IFML 537).

Remarks

Miquel (1989b) synonymized *D. abyssorum* (d'Orbigny, 1835) with *D. hygrohylaesus* (d'Orbigny, 1835). Here, we consider that they are different species, in concordance with d'Orbigny. *Drymaeus abyssorum* is more elongate, with a smaller shell diameter and a less expanded peristome. Animal coloration is different, mostly yellowish in *D. abyssorum* and generally reddish in *D. hygrohylaesus*. In Argentina, *D. abyssorum* inhabits mostly cloud forest in Jujuy western areas, whereas *D. hygrohylaesus* is currently restricted to "El Rey" National Park in Salta and to a small patch of cloud forest in a road between Salta and Jujuy provinces.

Drymaeus flossdorfi
(Holmberg, 1909)
Fig. 1N
[new combination]

Bulimulus Flossdorfi Holmberg, 1909a: 11; – Parodiz, 1957a: 134; Fernández, 1973a: 79. ?*Bostryx flossdorfi* – Breure, 1979: 136 [nomina inquirenda].

Type Locality: "(Territorio de Formosa), prope Nueva Pompeya".

Type Material: lectotype MACN-In 1352, paralectotype MACN-In 1352-1 (1) [present designation]. Lectotype: H = 30.73, DM = 12.77, Hap = 13.49, Dap = 7.77; paralectotype: H = 23.6, DM = 11.65, Hap = 11.79, Dap = 7.68.

Distribution: Paraguay?; Argentina, *Formosa Prov.*, Nueva Pompeya (MACN-In 1352). *Salta Prov.*, Rosario de la Frontera Dept. (MACN-In 1327). *Santiago del Estero Prov.*, Alberdi Dept., Campo Gallo (MACN-In 30616).

Remarks

MACN-In material from which the lectotype was selected was obtained from Holmberg's collection, originates from the type locality and shows same shell measurements. For this reason, we consider this material as syntypes.

On the other hand, according to Parodiz (1946a), this species is possible a synonym of *B. sporadicus*. Miquel (1991) assigned *B. flossdorfi* to *Bulimulus bonaeriensis sporadicus*. We tentatively classified *B. flossdorfi* to *Drymaeus*, because it presents the characteristic protoconch sculpture of a *Drymaeus* species. However, it would be necessary to collect fresh material that allows studying the anatomy to provide more supporting evidence.

Drymaeus hyltoni
Parodiz, 1957b

Drymaeus alabastrinus Hylton Scott, 1952: 25, non Da Costa, 1906; – Miquel, 1989b: 79, fig. 5.

Drymaeus hyltoni Parodiz, 1957b: 25; – Fernández, 1973a: 114; Richardson, 1995: 137.

Drymaeus (Drymaeus) hyltoni – Breure, 1979: 110; Miquel, 1989b: 78, figs. 18, 19.

Drymaeus alabastrinus – Breure, 1979: 106.

Type Locality: "Tartagal, Salta". This locality is located in General José de San Martín Dept.

Type Material: paratype MACN-In 32786.

Distribution: Argentina, *Jujuy Prov.*, *Salta Prov.*, General San Martín Dept., Tartagal (MACN-In 32786, MLP 11106).

Remarks

Hylton Scott originally named this species *D. alabastrinus*, and Parodiz (1957) recognized that it was pre-occupied by Da Costa (1906) for *D. alabastrinus* from Colombia. The type material of *D. hyltoni* is therefore the lot of *D. alabastrinus* housed at MACN-In collection on which Hylton Scott based the description of the species.

Drymaeus hygrohylaesus
(d'Orbigny, 1835)

Helix hygrohylaesa d'Orbigny, 1835: 18.

Bulimus (Bulimulus) hygrohylaesus – Beck, 1837: 63.

Bulimus hygrohylaesus – d'Orbigny, 1837 [1834–1847]: pl. 40, figs. 3–5; 1838: 311.

Bulimus Drymaeus hygrohylaesus – Albers, 1850: 156.

Drymaeus (Drymaeus) hygrohylaesus – Pilsbry, 1898: 194, pl. 37, figs. 9–11; Breure &

Eskens, 1981: 28, figs. 77–83, pl. 1, fig. 3; Miquel, 1989b: 77, 79, figs. 3, 4.

Drymaeus hygrophylaeus – Parodiz, 1946b: 315, pl. 1, fig. 7; 1957b: 24; Fernández, 1973a: 113; Breure, 1975: 1151; Quintana, 1982: 97; Richardson, 1995: 136.

Drymaeus harringtoni Marshall, 1931: 2; – Miquel, 1989b: 79, fig. 2.

Type Locality: “provincia Chiquitensi (republica Boliviana)”. In 1837 (1834–1847), d’Orbigny added: “nous avons rencontré cette belle espèce dans les forêts chaudes et humides des parties orientales de la province de Santa-Cruz de la Sierra (Bolivia), Dans toutes les forêts au nord de Chiquitos ...”.

Type Material: syntypes MNHN 24670 (1), Bolivia, Guarayos; MNHN 24669 (1) Bolivia, Yungas, Guarayos; MNHN 24668 (3) Bolivia, Monte Grande, Chiquitos; NHMUK1854.12.4.126-128 (12).

D. harringtoni: holotype: USNM 202509.

Distribution: Bolivia; Paraguay; Argentina, *Jujuy Prov.* (MLP 8561), Dr. Manuel Belgrano Dept., Guerrero (MACN-In 16232), Las Capillas (IFML 643, MLP 8562); San Pedro Dept., La Mendieta (MLP 85609); Santa Bárbara Dept., Finca Portal del cerro (IFML 14733); Valle Grande Dept., Valle Grande (IFML 14452). *Salta Prov.*, camino de corniza (MACN-In 33435, IFML 961), Río Pescado (IFML 1497); Anta Dept., El Rey National Park (IFML 15699 A); La Caldera Dept., La Caldera (IFML 985); Orán Dept., Orán (MACN-In 20472).

Drymaeus interpunctus
(Martens, 1887)

Bulimulus interpunctus Martens, 1887: 161.

Drymaeus interpunctus – Pilsbry, 1898: 287, pl. 5, figs. 4, 5; Parodiz, 1957b: 25; 1962: 437; Fernández, 1973a: 114; Quintana, 1982: 95.

Drymaeus (Mesembrinus) interpunctus – Breure & Eskens, 1981: 74, figs. 235–244; Miquel, 1989b: 81, figs. 13, 16.

Type Locality: “interpunctus, Piracicaba, Nehring”, in the handwriting of Martens. Piracicaba is located in Brazil, San Pablo state.

Type Material: lectotype ZMB 38952a; paralectotypes ZMB 38952b (5).

Distribution: Uruguay; Brazil; Paraguay; Argentina, *Misiones Prov.*, Candelaria Dept., Cerro

Corá (MLP 8563); Capital Dept., Posadas (MLP 8565); El Dorado Dept., El Dorado (MLP 8567); Guaraní Dept., El Soberbio (IFML 11218); Iguazú Dept., Cataratas del Iguazú (MACN-In 27289, MLP 8569).

**Drymaeus lynchi*
Parodiz, 1946
Fig. 10

Drymaeus lynchi Parodiz, 1946a: 1; – Parodiz, 1946b: 316, pl. 2, fig. 3; 1957b: 25; 1962: 439; Fernández, 1973a: 115.

Type Locality: “Bolivia, Pozo de Vargas”. In 1962, Parodiz added that “Pozo Vargas, is in the zone of Oriental Cordillera of Bolivia between Rio Grande and Parapeti, is probably an old toponym no longer in use, inasmuch as it is not found in modern maps”. Parodiz (1962) also stated that *Drymaeus lynchi* was found at Corumbá, on the right shore of Paraguay River in the Brazil-Bolivian border.

Type Material: holotype MACN-In 1344; paratypes MACN-In 1344-2 (5).

Distribution: Bolivia; Paraguay; Brazil; Argentina, *Corrientes Prov.*

Remarks

Holotype and paratypes are the unique material existing in the main Argentinean malacological collections examined. Parodiz (1957b) cited this species as inhabiting the Argentinean border with Bolivia. Fernández (1973a) mentioned that distribution of *D. lynchi* is in north-eastern Argentina and southern Brazil.

**Drymaeus oreades*
(d’Orbigny, 1835)

Helix oreades d’Orbigny, 1835: 11.

Bulimus oreades – d’Orbigny, 1837 [1834–1847]: pl. 31, figs. 11, 12; 1838: 270.

Bulimus (Mesembrinus) oreades – Albers, 1850: 158.

Thaumastus oreades – Doering, 1879: 73.

Drymaeus oreades – Pilsbry, 1898: 277, pl. 44, figs. 95, 96; Parodiz, 1957b: 25; 1962: 439; Fernández, 1973a: 115; Richardson, 1995: 158.

Type Locality: “provincia Corrientes (republica Argentina)”. In 1837 (1834–1847), d’Orbigny added: “Nous l’avons rencontré dans un bois

humide de la rive sud Rio de Santa-Lucia dans les environs de San Roque, province de Corrinetes (république Argentine)".

Type Material: syntypes NHMUK1854.12.4.161 (6).

Distribution: Brazil; Paraguay; Argentina, *Corrientes Prov.*?

Remarks

Parodiz (1962) stated that *D. oreades* had not been collected in Corrientes since the times of d'Orbigny and that it is more abundant in southern Brazil. Therefore, the presence of *D. oreades* in Argentina needs to be proved.

Drymaeus papyraceus (Mawe, 1823)

Helix papyracea Mawe, 1823: 168.

Bulimus papyraceus – Reeve, 1849: pl. 39, fig. 236; Parravivini, 1894: 6; Ancey, 1897: 5.

Bulimus (Bulimulus) papyraceus – Beck, 1837: 65.

Bulimus (Mesembrinus) papyraceus – Albers, 1850: 157.

Helix lita var. *major* d'Orbigny, 1835: 11.

Bulimus lita d'Orbigny, 1838 [1834–1847]: 268.

Otostomus (Mormus) Papyraceus – Doering, 1879: 77 [incorrect subsequent spelling].

Drymaeus (Drymaeus) papyraceus – Pilsbry, 1898: 250, pl. 51, figs. 1–3; Breure & Eskens, 1981: 32, figs. 100, 101.

Drymaeus papyraceus – Parodiz, 1946b: 358; 1957b: 24; 1962: 444; Fernández, 1973a: 115; Quintana, 1982: 97; Richardson, 1995: 159.

Drymaeus papyraceus var. *papyrifactus* – Pilsbry, 1898: 252, pl. 51, figs. 4, 5.

Drymaeus papyraceus papyrifactus – Parodiz, 1957b: 24; 1962: 444; Fernández, 1973a: 116; Miquel, 1989b: 78, figs. 6–8, 17; Scarambino, 2003: 209.

Type Locality: In the original description the type locality was not specified. Later, Ancey (1897) stated "...elle [*D. papyraceus*] vit dans la region de Corrientes". Pilsbry (1898) stated that "The type locality of *papyraceus* is Rio de Janeiro".

Type Material: Not located.

Distribution: Brazil; Uruguay; Paraguay; Argentina, *Buenos Aires Prov.*, Martín García Island

(MACN-In 22868, MACN-In 17702, MACN-In 11961, MACN-In 21051, MLP 8579). *Corrientes Prov.* (MACN-In 944), Capital Dept., Riachuelo (MACN-In 17479); Ituzaingó Dept., Puerto Luján (MACN-In 561); San Martín Dept., Laguna del Iberá (MACN-In 30663). *Formosa Prov.*, Laishi Dept., El Bagual (IFML 14358). *Misiones Prov.*, Puerto Bemberg (IFML 231), Concepción Dept., Santa María (MACN-In 8240); El Dorado Dept., El Dorado (MLP 8576, MLP 8577).

Remarks

D'Orbigny (1838 [1834–1847]) recognized two distinct varieties of this species. Later, Pilsbry (1898) explained that typical *papyraceus* is always elongate and narrow and inhabits in littoral of Brazil, from Rio Grande do Sul Province towards Bahia and Pernambuco states. The variety *papyrifactus*, is always shorter with more open aperture, living in Corrientes and Misiones provinces, Argentina.

Drymaeus poecilus (d'Orbigny, 1835)

Helix poecila d'Orbigny, 1835: 11.

Bulimus poecilus var. *major* d'Orbigny, 1837 [1834–1847]: pl. 31, figs. 1–10; 1838: 268.

Bulimus (Mesembrinus) poecilus – Albers, 1850: 158.

Otostomus (Mesembrinus) poecilus – Doering, 1879: 76.

Bulimulus poecilus – Ancey, 1892: 92.

Drymaeus poecilus – Pilsbry, 1898: 285, pl. 49, figs. 49–57; Parodiz, 1946b: 316, 321, fig. 7; 1957b: 25; 1962: 440; Fernández, 1973a: 116; Breure, 1975: 1152; Richardson, 1995: 163.

Drymaeus (Drymaeus) poecilus – Breure & Eskens, 1981: 32, figs. 102–108; Miquel, 1989b: 80, figs. 9–11, 14, 15.

Drymaeus (Drymaeus) poecilus poecilus – Parodiz, 1962: 441; Fernández, 1973a: 117.

Drymaeus (Drymaeus) poecilus minor – Parodiz, 1957b: 25; 1962: 441; Fernández, 1973a: 117.

Drymaeus poecilus poecilus – Quintana, 1982: 95.

Type Locality: "provincia Chiquitensi (republic Argentina)". In 1837 (1834–1847), d'Orbigny added the following details: "La varieté *major* habite les vallées des derniers contreforts des Andes boliviennes, avant de descendre dans les plaines de Santa-Cruz

de la Sierra, surtout à la porte de Tasajos et du bourg de Pampa grande...” “La variété *minor*...est propre aux immenses forêts qui bordent le Rio grande, entre Santa-Cruz de la Sierra et Chiquitos;...d’autres sous-variétés sont confinées à deux lieux plus à l’est Dans les forêts qui bordent le Rio de Tucabaca, entre San-Juan et Santo Corazon de Chiquitos”.

Type Material: syntypes MNHN 24679; MNHN 24678, Bolivia, Pampa Grande; MNHN 24677, Bolivia, Chiquitos; MNHN 24676, Bolivia, Chiquitos; MNHN 24675, Bolivia, San Juan, Pampa Grande; NHMUK1854.12.4.156-157 (18) Bolivia, Chiquitos.

Distribution: Bolivia; Paraguay; Argentina, *Catamarca Prov.*, Sierra del Alto (MACN-In 25871); Andalgalá Dept., Choya (MACN-In 25742); Belén Dept., Aguas de Dionisio (IFML 291); Paclín Dept., La Viña (MLP 8594). *Formosa Prov.* (MLP 8586), Bermejo Dept., Laguna Yema (MLP 8592); Matacos Dept. (IFML 15676). *Jujuy Prov.*, Obrajo, Palo Santo (IFML 11222), between Chalice y Quemado (IFML 7), on the road between Jujuy and San Pedro (IFML 593), 6 Km South Embarcación, Bermejo river (IFML 15664), South of Urundel (IFML 902); El Carmen Dept., Puesto Viejo (MACN-In 985, MLP 986); Ledesma Dept., Calilegua National Park (IFML 14181, IFML 14181), Ledesma (MLP 2952); San Pedro Dept. (MLP 8585); Santa Bárbara Dept. (MLP 8593). *Salta Prov.* (IFML 12765, IFML 15674), between Lumbrera and Juramento (IFML 576, IFML 811), Pileta (IFML 15669), 12 Km North of Yuto (IFML 15673), 50 km from Salta (IFML 12765), on the road between Salta and Cafayate (IFML 583); Anta Dept. (IFML 6134), Las Víboras (MLP 8589); Cafayate Dept., Quebrada de Las Conchas (MLP 2359); Capital Dept., Cerro San Bernardo (IFML 15662); Cerrillos Dept., Cerrillos (IFML 15695 A, IFML 15661); General Güemes Dept., Las Mesitas (IFML 15670); General José de San Martín Dept., Embarcación (MACN-In 8848-4, IFML 1404), Pocitos (MLP 8584), Tartagal (IFML 24); La Viña Dept., Alemania (MACN-In 585, MACN-In 17592, MLP 17592, MLP 2370, MLP 8587, MLP 2427), Talapampa (MLP 8588); La Candelaria Dept., pasando el Espinal (IFML 15688); Metán Dept., Cerro Colorado (MACN-In 26520, MLP 26520, IFML 828, IFML 15758, IFML 804), Dique Cabra Corral (IFML 15689), El Galpón (IFML 926), Lumbreras (MACN-In 23047, MLP 23047,

MLP 8590, IFML 811, IFML 420), Juramento River (MLP 19393, IFML 810, IFML 140), on the road from Metán to Güemes (IFML 1523, IFML 15672), on the road from Metán to El Galpón (IFML 15674); Orán Dept., Orán (MLP 8582), 8 Km N of Urundel (IFML 15668, IFML 11298), Urundel (IFML 15671, IFML 163, IFML 902, IFML 11298, MLP 8580), Manuel Elordi (MLP 8581); Rosario de la Frontera Dept. (MACN-In 6185, MLP 2776, IFML 2128, IFML 15665). San Juan Prov., Valle Fértil Dept., Ischigualasto (IFML 504). *Santiago del Estero Prov.*, Sierra de Guasayan (MACN-In 12950, MACN-In 13972, MLP 25848, IFML 14899), Pellegrini Dept., Cerro del Remate (IFML 209). *Tucuman Prov.* (IFML 11307, IFML 15666), on the road from Tucuman to La Cocha (IFML 15679), San Ignacio (IFML 1401); Burruyacu Dept. (IFML 11300, IFML 14900), El Duraznito (IFML 129); Capital Dept., San Miguel de Tucuman (IFML 15697A, IFML 14256); La Cocha Dept., Dique San Ignacio (IFML 964); Leales Dept., Estación Araoz (MACN-In 18318, MLP 18318, IFML 269); Juan Bautista Alberdi Dept., Escaba (IFML 15678); Leales Dept., El Guardamonte (IFML 146); Monteros Dept., Huasa Pampa (IFML 867); Tafí Viejo Dept., El Cadillal (MACN-In 9008, MLP 9008, IFML 151, IFML 14265), Los Nogales (IFML 81), San Javier National Park (IFML 14985); Trancas Dept., between Tapia and Vipos (IFML 10836, IFML 15667, IFML 15675, IFML 15677), El Boyero (IFML 14767), on the road from Tapia to Raco (IFML 853, IFML 15663), San Pedro de Colalao (MACN-In 9860-2, IFML 10839, IFML 15680), Tapia (IFML 853, IFML 10994, IFML 10836, IFML 10994, IFML 15683), Ticucho (IFML 14901), Vipos (MACN-In 17579, MACN-In 17593, IFML 15696 A, MLP 8595, IFML 11295, IFML 15682).

Remarks

D’Orbigny (1837, 1838 [1834–1847]) recognized two varieties of *Drymaeus poecilus*, variety *major* inhabiting the valleys of easternmost foothills of Bolivian Andes to the plains of Santa Cruz de la Sierra, and variety *minor* inhabiting forests along Rio Grande between Santa Cruz de la Sierra and Chiquitos in Bolivia. A third variety, *ictericus*, was introduced by Ancey (1892) in Matto Grosso, Brazil, based on two dry shells. In Argentina, the three varieties have been previously cited by Parodiz (1957b) and Fernández (1973) in their catalogues for Argentinean mollusks. However, as previously

stated by Parodiz (1962), d'Orbigny defined *D. poecilus major* as the first, more abundant form, and it is considered to be the nominal subspecies. There are no substantial differences between *D. poecilus major* and *D. poecilus minor* except for their shell sizes, for this reason they should not be treated as different entities, following Miquel's (1989b) criteria. *Drymaeus poecilus ictericus* has not been collected in any locality of Argentina and therefore is not mentioned in the present catalogue.

Genus *Naesiotus*
Albers, 1850

Type Species: *Bulimus nux* Broderip, 1832 [subsequent designation by Dall, 1896].

Geographic Distribution: Argentina, Bolivia, Brazil, Uruguay, Paraguay, Perú, Ecuador (including Galápagos), Colombia, Venezuela, Lesser Antilles.

Naesiotus calchaquinus
(Doering, 1879)

Bulimulus (Peronaeus) calchaquinus Doering, 1879: 64.

Bulimulus (Bostryx-Peronaeus) calchaquinus – Pilsbry, 1896: 151.

Peronaeus (Peronaeus) calchaquinus – Parodiz, 1946b: 315; Fernández, 1973a: 87.

Peronaeus calchaquinus – Parodiz, 1957b: 22.

Bostryx calchaquinus – Breure, 1979: 52.

Naesiotus calchaquinus – Miquel, 1989a: 63, figs. 1–3.

Type Locality: "Sierra de Belén". The mountain system called Sierra de Belén is located in Catamarca Prov., Belén Dept.

Type Material: Not located.

Distribution: Argentina, Catamarca Prov., Ambato Dept., La Puerta (MACN-In 483); Capayán Dept. (MACN-In 17775).

Naesiotus crepundia
(d'Orbigny, 1835)

Helix (Cochlogena) crepundia d'Orbigny, 1835: 14.

Bulimulus crepundia – d'Orbigny, 1837 [1834–1847]: pl. 33, figs. 18, 19; 1838: 275; Zischka, 1953: 78.

Bulimus rivasii d'Orbigny, 1837 [1834–1847]: pl. 34, figs. 8, 10; 1838: 276 – Pfeiffer, 1848: 155; Reeve, 1849: 20, pl., 122, fig.; Gray, 1854: 16.

Bulimulus rivasii – Zischka, 1953: 80.

Bulimulus crepundia – Reeve, 1849: 47, fig. 330

Bulimulus (Protoglyptus) crepundia – Pilsbry, 1897: 90, pl. 11, figs. 33, 34.

Bulimulus (Protoglyptus) rivasii – Pilsbry, 1897: 91, pl. 12, figs. 40, 41.

Protoglyptus punctustriatus Parodiz, 1946a: 315; 1957b: 22.

Protoglyptus (Protoglyptus) punctustriatus – Parodiz, 1946b: 315, 352, pl. 1, fig. 5; Fernández, 1973a: 103.

Protoglyptus (Protoglyptus) crepundia – Parodiz, 1946b: 315, 319, fig. 4, pl. 1, fig. 11.

Protoglyptus (Protoglyptus) rivassi – Parodiz, 1946b: 315.

Naesiotus punctustriatus – Breure, 1979: 71.

Naesiotus rivasii – Breure, 1975: 1147; Miquel, 1989a: 70, figs. 12–14; Ramírez et al., 2003: 280.

Naesiotus crepundia – Breure, 1975: 1146, pl. 8, fig. 6; 1979: 68.

Type Locality: "provincia Chiquitensi (republica Boliviana)". In 1837 (1834–1847) d'Orbigny added "... sur les coteaux de gres ancien du Sutos, pres de la Mission de San José".

Type Material: lectotype MNHN 25403, paralectotypes (3) MNHN 25404.

Protoglyptus (Protoglyptus) punctustriatus: holotype MACN-In 991; paratypes MACN-In 991-1 (4).

Distribution: Bolivia; Brazil; Peru; Argentina, Jujuy Prov., Santa Bárbara Dept., Puesto Viejo (MACN-In 991, MACN-In 991-1). Salta Prov., Anta Dept. (MACN-In 367); General José de San Martín Dept., Embarcación (MACN-In 8848, FMNH 125187, FMNH 30613).

Naesiotus deletangi
(Parodiz, 1946)

Protoglyptus deletangi Parodiz, 1946a: 3.

Protoglyptus (Rimatula) deletangi – Parodiz, 1946b: 315, pl. 1, fig. 6; Fernández, 1973a: 103.

Protoglyptus (Rimatula) minutissimus Parodiz, 1962: 445.

Naesiotus deletangi – Breure, 1979: 69; Miquel, 1989a: 65, figs. 5, 6.

Type Locality: “Embarcación, provincia de Salta, Republica Argentina”. This locality is located into General José de San Martín Dept., Salta Prov.

Type Material: holotype MACN-In 3131; paratypes MACN-In 3131-1 (17).

Distribution: Bolivia; Argentina, *Salta Prov.* (FMNH 125935, FMNH 30614), General José de San Martín Dept., Embarcación (MACN-In 3131, MACN-In 3131-1), Las Tablillas (MACN-In s/n), General Mosconi and Estación Vespucio (MLP s/n); Orán Dept., Urundel (IFML 1497). *Tucuman Prov.* (IFML 128), Burruyacú Dept., El Duraznito (IFML 127), San Pedro de Colalao (IFML 816, IFML 4014); Juan Bautista Alberdi Dept., Escaba (IFML 14247); La Cocha Dept., Dique San Ignacio (IFML 971); Tafí Viejo Dept., San Javier National Park (IFML 14982, IFML 14983, IFML 14984); Trancas Dept. (IFML 15250), El Cadillal (IFML 14272, IFML 15179, IFML 15180, IFML 15181).

Naesiotus montivagus
(d'Orbigny, 1835)

Helix (Cochlogene) montivaga d'Orbigny, 1835: 14.

Bulimus montivagus – d'Orbigny, 1837 [1834–1847]: pl. 34, figs. 1–3; 1838: 275; Pfeiffer, 1848: 112; Reeve, 1849: pl. 67, fig. 475; Gray, 1854: 15; Doering, 1874a: 54.

Peronaeus montivagus – Albers, 1850: 163.

Chondrus (Peronaeus) montivagus – Adams & Adams, 1858 [1853–1858]: 165.

Bulimus montivagus var. *chacoensis* Ancey, 1897: 16; – Breure, 2011: 19.

Bulimulus (Protoglyptus) montivagus – Pilsbry, 1897: 90, pl. 11, figs. 29, 30; pl. 14, figs. 14, 15.

Bulimulus montivagus – Pilsbry, 1901: 147.

Protoglyptus (Rimatula) montivagus – Parodiz, 1946b: 315, pl. 1, fig. 10; 1957b: 22; Fernández, 1973a: 103.

Naesiotus montivagus – Breure, 1975: 1146; Breure & Coppo, 1978: 178; Quintana, 1982: 94.

Naesiotus montivaga – Breure, 1979: 70 [incorrect subsequent spelling].

Type Locality: “provincia Lagunensi (republica Boliviana); et provincia Entre-Rios (republica Argentina)”. In d'Orbigny (1838 [1834–1847]) the author added to the information of the type locality: “ Nous avons rencontré cette espèce d'abord sur les coteaux du Parana ... province d'Entre-rios (république Argentine)

... des Andes orientales, dans les provinces de Valle Grande et de la Laguna, et dans le *Monte grande* ... qui sépare Santa –Cruz de la Sierra de la province de Chiquitos ...”.

Type Material: syntypes MNHN s/n: Bolivia (2); MNHN s/n Bolivia, Pampa (5).

Bulimus montivagus var. *chacoensis*: lectotype RBINS/MT 2342.

Distribution: Brazil; Bolivia; Paraguay; Argentina, *Catamarca Prov.* (MLP 1481), Ambato Dept., La Puerta (MACN-In 483), Las Trancas (MLP 1318). Entre Ríos Prov. (MACN-In 14644). *Salta Prov.*, Capital Dept., San Lorenzo (MACN-In 6587); General José de San Martín Dept., lomas near Tartagal (FMNH 30612), Vespucio (MACN-In 6511). *Jujuy Prov.* (IFML 856, IFML 15613). *Santiago del Estero Prov.*, Pellegrini Dept., Cerro del Remate (MACN-In 23045). *Tucuman Prov.*, Graneros Dept., La Madrid (MACN-In 12116); Trancas Dept., El Cadillal (IFML 15179, IFML 15180, IFML 15181).

Naesiotus munsterii
(d'Orbigny, 1837)

Bulimus munsterii d'Orbigny, 1837 [1834–1847]: pl. 34, figs. 4–7; 1838: 278; Pfeiffer, 1848: 109; Gray, 1854: 16.

Bulimulus (Bostryx-Lissoacme) munsteri – Pilsbry, 1896: 185, pl. 51, figs. 9–11 [incorrect subsequent spelling].

Bulimulus munsteri – Zischka, 1953: 79.

Protoglyptus (Protoglyptus) munsteri – Parodiz, 1946b: 315; Fernández, 1973a: 102.

Protoglyptus munsteri – Parodiz, 1957b: 22.

Protoglyptus ramosae Hylton Scott, 1951a: 23, pl. 1, fig. 6; – Parodiz, 1957b: 22.

Protoglyptus (Protoglyptus) ramosae – Fernández, 1973a: 101.

Naesiotus munsteri – Breure, 1975: 1147.

Naesiotus munsterii – Miquel, 1989a: 67, figs. 7, 8.

Naesiotus ramosae – Breure, 1979: 71.

Type Locality: “... la côte de *Petaca*, ... des Andes orientales ... les Plaines de Santa-Cruz de la Sierra, en Bolivia.”

Type Material: syntypes MNHN 25392 (2), Bolivie, Cote de la Petaca; probable syntypes MNHN 25393 (2), Bolivie, Chiquitos; MNHN 25394 (1), Bolivie, Rio Grande.

Protoglyptus ramosae: holotype MLP 11366; paratypes MLP 11365 (3), MLP 1137 (4).

Distribution: Bolivia; Argentina, *Salta Prov.*, General José de San Martín Dept., Embarcación (MACN-In 9341).

Naesiotus oxylabris
(Doering, 1879)

Bulimulus (Scutalus) oxylabris Doering, 1879: 65.

Bulimulus (Bulimulus) centralis Doering, 1879: 69.

Bulimulus (Bostryx-Lissoacme) centralis – Pilsbry, 1896: 188.

Bulimulus (Bostryx-Lissoacme) oxylabris – Pilsbry, 1896: 190.

Protoglyptus (Rimatula) oxylabris – Parodiz, 1946b: 315, 319, fig. 3, pl. 2, fig. 4; 1957b: 22; Fernández, 1973a: 104.

Naesiotus oxylabris – Breure & Coppo, 1978: 180; Miquel, 1989a: 68, figs. 10, 11.

Naesiotus centralis – Breure, 1979: 68.

Type Locality: “primera sierra de Cordoba, en los terrenos calcáreos como en la Calera, San Antonio Maldonado, Alta Gracia ...”. The original records indicated by Doering are located in Cordoba Prov.

Type Material: Not located.

Distribution: Chile; Argentina, *Cordoba Prov.* (ZMB 34720, FMNH 126456, MLP 9494, MACN-In 1882), Colón Dept., Calera (MACN-In 9949); Cruz del Eje Dept. (MACN-In 14857, MACN-In 9897, IFML 15630, MCZ 108687), Estancia La Fronda (IFML 15619), La Loma (MACN-In 1638), to San Marcos Sierra (IFML 15616); Ischilín Dept. (MLP 9495), between Ongamira and Ischilín (FMNH 36614), Deán Funes (IFML 10835), from Deán Funes to Sauce Punca (MACN-In 3238), Cerro San Vicente (IFML 15617), Copacabana (MLP s/n, FMNH 72241, FMNH 78341), Villa Mirador del Lago (IFML 15629); Pocho Dept., between Tanninga and Salsacate (IFML 10883, IFML 15631), Sierra de Pocho (MACN-In 920); Punilla Dept., Capilla del Monte (MACN-In 13255, MACN-In 1878, MACN-In 14855, IFML 830, IFML 15633), route to Capilla del Monte (IFML 15614, IFML 15615), Cerro Uri-torco (MACN-In 37764), Cosquín (MACN-In 1651), Pampa de Olaen (MACN-In 1665), La Cumbre (MACN-In 9228, MACN-In 9226, MACN-In 3239, MACN-In 30572, MACN-In 1329), between La Cumbre and Capilla del Monte (MACN-In 9228), La Falda (MACN-In

1875, MACN-In 23555), Los Cocos (MACN-In 6581), Molinari (MCZ 263565), Ongamira (MLP 36009-2), San Antonio (MACN-In 10427), Valle Hermoso (MACN-In 1667, MACN-In 1628); Santa María Dept. (MACN-In 14856, MACN-In 291), Potrero de Garay (MACN-In 291); Totoral Dept. (FMNH 36613), Villa General Mitre (IFML 15632), La Loma (MACN-In 1638); Tulumba Dept., Tulumba (IFML 15618), route from Dean Funes to Tulumba (IFML 15656 A); Santa Rosa de Calamuchita Dept. (MACN-In 3221, MACN-In 23591), Calamuchita (MACN-In 3221), Est. Casa Grande (MACN-In 9697), Los Sauces (MLP 2388), Valle de los Reartes (MLP 1485, MACN-In 13253, MACN-In 9919, FMNH 53069, FMNH 31285, FMNH 126850, FMNH 17261), Villa General Belgrano (Embalse Los Molinos) (MCZ 239221). *San Luis Prov.*, General Pedernera Dept., Cerro del Morro (MACN-In 30575).

Naesiotus pollonerae
(Ancey, 1897)

Bulimulus pollonerae Ancey, 1897: 17; – Wood & Gallichan, 2008: 77.

Bulimulus (Protoglyptus) pollonerae – Pilsbry, 1901: 148, pl. 45, fig. 30.

Protoglyptus (Rimatula) pollonerae – Parodiz, 1946b: 315; 1957b: 22; Fernández, 1973a: 105.

Naesiotus pollonerae – Breure & Coppo, 1978: 181; Breure, 1979: 71; Miquel, 1989a: 69, fig. 17; Breure, 2011: 38.

Type Locality: “San Lorenzo, province de Jujuy, Republique Argentine”.

Type Material: lectotype RBINS/MT 2369(1); paralectotype RBINS/MT 2370(1).

Distribution: Argentina, ?*Buenos Aires Prov.*, hills of San Nicolás, margin of Parana river (MACN-In 6435); *Salta Prov.* (MACN-In 3132), Orán Dept., Urundel (IFML 15620).

Naesiotus rocyanus
(d’Orbigny, 1835)

Helix (Cochlogene) rocyana d’Orbigny, 1835: 13.

Bulimus rocyanus – d’Orbigny, 1837 [1834–1847]: pl. 33, figs. 6, 7; 1838: 277; Pfeiffer, 1848: 35.

“*Bulimulus*” *rocayanus* – Pilsbry, 1898: 321, pl. 44, figs. 4, 5.

Proto glyptus (*Obstrussus*) *rocayanus* – Parodiz, 1946b: 315; 1957b: 22; Fernández, 1973a: 105.

Drymaeus rocayanus – Zischka, 1953: 82.

Naesiotus rocayanus – Breure, 1975: 1147.

Naesiotus pollonerae – Miquel, 1989: 69 [partim].

Type Locality: “provincia Santa Cruz de la Sierra (republica Boliviana)”. In 1837 [1834–1847], d’Orbigny gave more details saying: “...bois épais qui bordent le Rio grande, au sud de Santa-Cruz de la Sierra, surtout près du hameau de *Pacu*”.

Type Material: lectotype MNHN 25391.

Distribution: Bolivia; Argentina, *Jujuy Prov.* (MACN-In 1341), *Ledesma Dept.*, *Calilegua National Park* (MLP s/n). *Salta Prov.*, *General José de San Martín Dept.*, *Carapará* (MACN-In 6513); *Guachipas Dept.*, *Alemanía* (MACN-In 17600).

Naesiotus willinki

Breure, 1978

Fig. 1P

Naesiotus willinki Breure, 1978: 162, figs. 262–269, pl. 12, fig. 2; – Breure, 1979: 72.

Naesiotus pollonerae – Miquel, 1989a: 69, figs. 18, 19 [partim].

Type Locality: “Argentina, Prov. Salta, Estancia Lumbrera, 750 m”.

Type Material: holotype IFML 1263a; paratypes IFML 1263 (11), IFML 815 (14), RMNH 55323 (10).

Distribution: Argentina, *Salta Prov.*, *Metán Dept.*, *Estancia Lumbrera* (IFML 1263a, IFML 815, RMNH 55323), 24 km from Metán on the road to Galpón (IFML 1264, RMNH 55324), between Lumbrera and Juramento (IFML 15707).

Genus *Scutalus*

Albers, 1850

Type Species: *Bulimus proteus* Broderip [subsequent designation by Albers, 1860].

Geographic Distribution: Argentina, Bolivia, Peru, Ecuador.

Scutalus tupacii
(d’Orbigny, 1835)

Helix Tupacii d’Orbigny, 1835: 16.

Bulimus tupacii – d’Orbigny, 1837 [1834–1847]: pl. 38, figs. 1, 5; 1838: 292; Pfeiffer, 1848: 52; Parravivini, 1894: 7.

Bulimulus (*Scutalus*) *tupacii* – Pilsbry, 1897: 19, pl. 3, figs. 27–31.

Bulimus (*Orphus*) *tupacii major* – Doering, 1875a [1877]: 338.

Bulimus (*Orphus*) *tupacii minor* – Doering, 1875a [1877]: 339.

Scutalus tupaci – Parodiz, 1946b: 315, 320, fig. 6, pl. 2, fig. 5; 1957a: 134; 1962: 450 [incorrect subsequent spelling].

Kuschelenia simulans Hylton Scott, 1951b: 540, figs. 1–4; – Fernández, 1973a: 87 [new synonymy].

Scutalus tupacii – Fernández, 1973a: 101; Breure, 1975: 1144, pl. 2, fig. 3.

Scutalus (*Kuschelenia*) *tupacii* – Breure, 1978: 186, fig. 136, pl. 18, figs. 7, 8; 1979: 88, fig. 140; Miquel, 1998: 183, figs. 8, 9, 14, 18, 19.

Type Locality: “Bolivia, La Paz, Yanacachi”.

Type Material: lectotype MNHN 24710, Bolivia; paralectotypes MNHN 24713(3), MNHN 24712 (4), MNHN 24711(2).

Kuschelenia simulans: holotype MLP 11219.

Distribution: Bolivia; Paraguay; Argentina, *Catamarca Prov.*, *Andalgalá Dept.*, *Las Estancias* (IFML 10940), *Sierra de Gracián* (IFML 257, IFML 15691); *Formosa Prov.*, *Pirané Dept.*, *Guayacan*, (IFML 236). *Jujuy Prov.*, *Ledesma Dept.*, *Calilegua National Park* (IFML 15559); *Palpalá Dept.* (MACN-In 8114); *Santa Barbara Dept.* (MACN-In 15948). *Salta Prov.*, *Anta Dept.*, *El Rey National Park* (IFML 14245); *Capital Dept.* (MACN-In 29965); *Rosario de Lerma Dept.* (MACN-In 10015). *Santiago del Estero Prov.*, *Capital Dept.*, *El Zanjón* (IFML 14277). *Tucuman Prov.*, *Burruyacu Dept.*, *Alto de Medina* (IFML 572), between Zamorá and Taficillo (IFML 624), from Acheral to Tafí del Valle (IFML 15684); *Capital Dept.* (MACN-In 35675, MACN-In 35676, MACN-In 6182); *Chicligasta Dept.*, *Alpachiri* (IFML 77), *Campo de Los Alisos National Park* (IFML 15247); *Lules Dept.*, *Villa Nougues* (MACN-In 1641, MACN-In 18320, IFML 10995, IFML 64, IFML 10493,

IFML 14243); Tafí del Valle Dept. (IFML 68, IFML 386), La Quebradita (IFML 15222), Quebrada Los Sosa (IFML 15690); Tafí Viejo Dept., El Cadillal (MACN-In 9007, MACN-In 9915, IFML 182, IFML 239, IFML 15221, IFML 14274, IFML 15224, IFML 15226, IFML 15686), Taficillo (IFML 11309, IFML 624); Yerba Buena Dept., Horco Molle (MACN-In 30612, IFML 452, IFML 569, 570, IFML 15692, IFML 14249, IFML 15223, IFML 15225), San Javier (MACN-In 1315, MACN-In 37821, IFML 14979, IFML 14580, IFML 14967, IFML 14980, IFML 14981, IFML 858, IFML 570, IFML 15693, IFML 15694); Trancas Dept., La Higuera (IFML 10942), Sierra del Nogalito (IFML 819, IFML 820, IFML 15687); Concepción Dept., Rio Cochuna (IFML 819).

Remarks

Breure (1975) stated that d'Orbigny figure of a specimen of *Scutalus tupacii* was designated lectotype because the three syntypes deposited at MNHN collection did not have exact localities. However, currently there is a specimen designated as "Lectotype" at MNHN collection, and its number is here provided.

Scutalus (Kuschelenia) simulans (Hylton Scott, 1951b) (Fig. 1Q) is here synonymized with *Scutalus tupacii* d'Orbigny, 1835, because the former species clearly falls between variable morphotypes described for *Scutalus tupacii*. These were illustrated by Pilsbry (1897). The smooth protoconch attributed to *S. (K.) simulans* by Hylton Scott in her original species description is a misinterpretation. The holotype, which is the single shell existing of *Scutalus (Kuschelenia) simulans*, has an eroded protoconch. However, typical sculpture of *S. tupacii* protoconch is visible in the surface close to suture between protoconch and first whorl in *S. (K.) simulans* holotype. There are no characters proper from *Scutalus (K.) simulans* that allows its differentiation from *S. tupacii*. The area of distribution of *S. (K.) simulans* is also included into the area of occurrence of *S. tupacii*.

Weyrauch identified as *Scutalus pluto* (Crosse) several lotes collected in Argentina, mainly in Tucumán and deposited at the malacological collection of IFML. However, we consider that these dry shells are also morphotypes that clearly falls into the ranges of variability proper of *Scutalus tupacii*. The lectotype of *S. pluto* at MNHN is also very similar in morphology and size to *S. tupacii*. Moreover, known area of occurrence of *Scutalus pluto* is beyond

Argentina limits, and this species is known to occur in Peru. *Scutalus pluto* does not occur in Argentina.

Recently, Breure (2011) restricted the genus *Scutalus* to the subgenus *Scutalus (Scutalus)* *sensu* Breure (1979), giving generic status to *Kuschelenia*. *Vermiculatus* was also considered by Breure (2011) a subgenus of *Kuschelenia*. Here, we followed the classification of *Scutalus* previously proposed by Breure (1979) because no clear taxonomic justification for the recent changes has been provided and therefore characters that allow a clear differentiation among these entities are lacking.

Family Odontostomidae
Pilsbry and Vanatta, 1898

Genus *Clessinia*
Doering, 1875

Type Species: *Clessinia stelzneri* Doering, 1875.

Geographic Distribution: Argentina.

Clessinia cordovana
(Pfeiffer, 1855)
[new combination]

Bulimus cordovanus Pfeiffer, 1855: 149; – Pfeiffer, 1856: 34; 1859: 435; Dohrn, 1875: 202; 1877: 157; Kobelt, 1878: 150; Martens, 1890–1891: 251; Breure, 1974b: 114.

Bulimus "Macrodonates" cordovanus – Doering, 1875a [1877]: 331.

Odontostomus (Scalarinella) cordovanus – Pilsbry, 1901: 66, pl. 13, fig. 100.

Odontostomus (Macrodonates) cordovanus – Holmberg, 1912b: 153.

Odontostomus (Scalarinella) cordovanus – Parodiz, 1939: 732, fig. 1.

Odontostomus (Scalarinella) cordovanus striatus – Parodiz, 1939: 733.

Cyclodontina (Scalarinella) cordovana – Parodiz, 1957b: 29.

Cyclodontina (Clessinia) cordovanus – Hylton Scott, 1966: 31, figs. 1–5, 7.

Cyclodontina (Clessinia) gracilis Hylton Scott, 1966: 34, fig. 6, 8 [new synonymy].

Clessinia cordovana – Fernández, 1973a: 142.

Clessinia gracilis – Fernández, 1973a: 144.

Odontostomus (Scalarinella) cordovanus striatus – Breure, 1974b: 124.

Cyclodontina (Clessinia) gracilis – Breure, 1974b: 116.

Type Locality: "Hab. In Andibus prope Cordova". Doering (1875a [1877]) added that the type locality is found in Argentina, western slope of the *Sierra del Aconquija* in moist places, in Quebradas de la Mermela, de Jatan, del Nieve and further south close to Agua de los Oscuros.

Type Material: lectotype SMF 10417 a; paralectotypes SMF 10417 b, MLP 1493, MACN-In 9127.

Distribution: Argentina, *Catamarca Prov.*, Ambato Dept., Puerta de Ambato (MACN-In 421). *Cordoba Prov.* (FLMNH 109762, FLMNH 178615, MACN-In 9127), Cruz del Eje Dept., Serrezuela (MACN-In 19624); Ischilin Dept., Cerro San Vicente (IFML 10789, IFML 10739, MACN-In 9226); Pocho Dept., Sierra de Pocho (IFML 13521, IFML 15240, IFML 15241); Tulumba Dept. (FMNH 36596, IFML 14745), from San José de La Dormida to Tulumba (IFML 15245); Cruz del Eje Dept., San Marcos Sierra (IFML 15774 A, MACN-In 1593, IFML 15772 A, IFML 15770 A, IFML 15768 A).

Remarks

C. gracilis is here synonymized with *C. cordovana* because type general morphology and shell measurements falls into shell variability described for *Clessinia cordovana*. The area of distribution is also overlapping.

Clessinia stelzneri
(Doering, 1875)

Bulimus (Clessinia) stelzneri – Doering, 1874c [1875]: 201.

Bulimus "Macrodonates" cordovanus var. *stelzneri* – Doering, 1875a [1877]: 332; 1875b [1877]: 250.

Odontostomus (Scalarinella) cordovanus var. *stelzneri* – Pilsbry, 1901: 67.

Odontostomus (Scalarinella) cordovanus *stelzneri* – Parodiz, 1939: 732, fig. 2.

Scalarinella (Scalarinella) cordovana stelzneri – Zilch, 1959–1960: 508.

Cyclodontina (Scalarinella) cordovanus stelzneri – Parodiz, 1957b: 29.

Scalarinella (Scalarinella) cordovana stelzneri – Zilch, 1971: 198, pl. 12, fig. 14.

Clessinia stelzneri – Breure, 1974b: 124; – Neubert & Janssen, 2004: 230, pl. 19, fig. 248.

Clessinia cordovana stelzneri – Breure & Schouten, 1985: 9, fig. 3.

Type Locality: "... quebrada de Yatan (Serrezuela; Provincia de Córdoba)". According to Hylton Scott (1966) the type locality would be located in Argentina, Cordoba Prov., Cruz del Eje Dept., Yatán, Serrezuela.

Type Material: lectotype SMF 10417/3 a; paralectotypes SMF 26582 (1), SMF 26583 (2), SMF 325584 (4).

Distribution: Argentina, *Cordoba Prov.*, Cerro San Vicente (IFML 10739).

Clessinia nattkemperi
(Parodiz, 1944)

Cyclodontina (Scalarinella) nattkemperi Parodiz, 1944: 1–2, figs. A–D; – Parodiz, 1957b: 29; Breure, 1974b: 119.

Clessinia nattkemperi – Fernández, 1973a: 144.

Type Locality: "Pomancillo, 23 km de la ciudad de Catamarca, Republica Argentina".

Type Material: holotype MACN-In 25713, paratypes MLP 1109.

Distribution: Argentina, *Catamarca Prov.*, Fray Mamerto Esquiú Dept., Pomancillo (IFML 11058, IFML 15186 A, IFML 15185 A, IFML 15764, IFML 15776 A, MLP 11092); Santa María Dept., El Desmonte (IFML 10979).

Clessinia pagoda
Hylton Scott, 1967
Fig. 2A

Clessinia pagoda Hylton Scott, 1967a: 98, figs. 1–6; – Fernández, 1973a: 144; Breure, 1974b: 120; Neubert & Janssen, 2004: 221, pl. 19, fig. 247.

Type Locality: "Quilpo, Sierra Chica de Córdoba". This locality is part of the Cruz del Eje Dept. in Cordoba Prov., Argentina.

Type Material: holotype MLP 11080; paratypes MACN-In 27284, IFML 14239, SMF 220916 (2), MLP 11076, MLP 11081, MLP 11077, MLP 11078, MLP 11075, MLP 11079.

Distribution: Argentina, *Cordoba Prov.*, Cruz del Eje Dept., Quilpo (MACN-In 27284, IFML 14239, IFML 15178, IFML 1003; IFML 15759 A, MLP 8384, MLP 8387, MLP 8388, MLP 8389, MLP 8386), San Marcos Sierra (IFML 15760 A, IFML 15763, MLP 8390, MLP 8385).



FIG. 2. Type material of Odontostomidae species housed in Argentinean museums. A: *Clessinia pagoda* Hylton Scott, 1967 (paratype IFML 14239); B: *Pilsbrylia hyltonae* Fernández & Rumi, 1980 (lectotype MLP 3991); C: *Spixia cuezzoe* Salas Oroño, 2010 (holotype IFML 15284); D: *Spixia doellojuradoi minor* Parodiz, 1941 (holotype MACN-In 13244); E: *Spixia marmorata* (Hylton Scott, 1971) (holotype MLP 11462); F: *Spixia parodizi* (Hylton Scott, 1952) (holotype MLP 11093); G: *Spixia tucumanensis* (Parodiz, 1941) (holotype MACN-In 23108). Scale bar = 1cm.

Genus *Cyclodontina*
Beck, 1837

Type Species: *Pupa inflata* Wagner in Spix (1827) [subsequent designation by Pilsbry, 1901: 58].

Geographic Distribution: Argentina, Bolivia, Brazil, Paraguay, Uruguay?

Cyclodontina (Bahiensis) guarani
(d'Orbigny, 1835)

Helix guarani d'Orbigny, 1835: 21.

Bulimus guarani – d'Orbigny, 1837 [1834–1847]: pl. 41, fig. 1; 1838: 318; Pfeiffer, 1848: 206; 1853: 427; 1859: 487; 1868: 132.

Pupa (Cyclodontina) guarani – Beck, 1837: 88.

Odontostomus (Bahiensis) guarani – Pilsbry, 1901: 53, pl. 10, figs. 29, 30; Parodiz, 1942b: 332, fig. 15, pl. 3, fig. 25.

Bulimulus guarani – Bertoni, 1926: 73.

Cyclodontina (Bahienesis) guarani – Lange de Morretes, 1954: 70; Parodiz, 1957b: 27; Fernández, 1973a: 120.

Helix guarani – Breure, 1974b: 116.

Cyclodontina (Bahienesis) guarani – Quintana, 1982: 99.

Bahiensis guarani – Breure & Ablett, 2011: 4, fig. 18 A–B iii.

Type Locality: “provincia Corrientesensi (república Argentina)”. Parodiz (1957b) clarified that the type locality of this species is on Parana River at Corrientes- Misiones border, most probably between Ituzaingó and Posadas.

Type Material: lectotype NHMUK 1854.12.4.140.

Distribution: Paraguay; Argentina, (MCZ 182046). *Corrientes Prov.* (MLP 8431), Ituzaingó Dept., Puerto Luján (MACN-In 560); *Santo Tomé Dept.*, Galarza (MLP 8439). *Misiones Prov.*, Apóstoles Dept., Apóstoles (MLP 8437); *Candelaria Dept.*, Profundidad (MACN-In 19886, MACN-In 35901, MLP 8434); *Capital Dept.* Posadas (MLP 8438, MLP 8443); *El Dorado Dept.*, El Dorado (MLP 8442); *Iguazú Dept.* Paraná River near Iguazú

falls (FLMNH 1325649, Pto. Bertoni (MACN-In 9496-2); San Ignacio Dept., San Ignacio (MACN-In 23118, MACN-In 16984); San Javier Dept. (MACN-In 36890); 25 de Mayo Dept., Pto. Londero (MACN-In 6654).

Cyclodontina (Ventania) avellanadae
(Doering, 1881)
[new combination]

Eudioptus avellanadae Doering, 1881: 64, pl. 1, figs. 2, 3.

Anctus (?) stearnsianus – Pilsbry, 1896a: 41.

Odontostomus (Spixia) avellanadae – Pilsbry, 1901: 91, pl. 11, figs. 56–59.

Odontostomus (Ventania) avellanadae – Parodiz, 1940: 229, fig. 5; 1942b: 334, pl. 3, fig. 27.

Cyclodontina (Ventania) avellanadae – Parodiz, 1944: 5; 1957b: 28.

Anctus (?) – stearnsianus – Baker, 1963: 230.

Cyclodontina (Ventania) avellanadae – Fernández, 1973a: 121.

Eudioptus avellanadae – Breure, 1974b: 112.

Type Locality: "... rocas cuarcíticas de la Sierra de Currumalan". Doering (1881) added that later he also found this species in mountains of Sierra de La Ventana.

Type Material: Not located.

Distribution: Argentina, *Buenos Aires Prov.*, Abra de La Ventana (MACN-In 26628), Pileta de los Tres Ríos (IFML 295), Sierra de La Ventana (MACN-In 9487, MACN-In 11270, MACN-In 21163, MACN-In 23090, MACN-In 1644, MACN-In 24395, MACN-In 21263, MACN-In 94874, MACN-In 26628, MCZ 182051, MLP 8433, MLP 8432, MLP 8434, MLP 8435), Sierra de Cura Malal (MACN-In 11085, MACN-In 18196, MACN-In 14201, MLP 1611).

Remarks

The phylogenetic affinity of this monotypic subgenus is currently unknown, showing similar shell morphology to some species classified into *Cyclodontina (Bahiensis)*. However, *Cyclodontina (Ventania) avellanadae* is endemic to an isolated mountain system region in Buenos Aires Province together with *Plagiodontes rocae* and *P. patagonica*. We maintained the classification of this species in a different subgenus because its occurrence is far away from any known species belonging to *Cyclodontina (Bahiensis)*, awaiting a taxonomic revision of this subgenus.

Genus *Odontostomus*
Beck, 1837

Type Species: *Helix gargantua* Férussac, 1821 [synonym: *Bulimus odontostomus* G. B. Sowerby I, 1824].

Geographic Distribution: Argentina, Paraguay, Brazil.

Remarks

The type species, *Odontostomus odontostomus*, was established by tautonymy although the availability of the name is not affected by tautonymy (Art. 18, ICZN).

Holmberg (1909b) described *Odontostomus icareus* from Santiago del Estero Province (syntypes: MACN-In 1365). *Odontostomus icareus* has been cited in previous catalogues (Fernández, 1973a; Breure, 1974b) as a species currently living in Argentina. After examining the type material in MACN, we realize that *O. icareus* has been misidentified and clearly belongs in the genus *Plagiodontes*, probably to *P. daedaleus* distributed in Santiago del Estero Province, also type locality of *O. icareus*.

Odontostomus gargantua
(Férussac, 1821)

Helix (Cochlogena) gargantua Férussac, 1821: 62.

Bulimus odontostoma G. B. Sowerby I, 1824: 59, pl. 5; – Reeve, pl. 38, fig. 228.

Odontostomus gargantula – Beck, 1837: 54 [incorrect subsequent spelling].

Macrodonates sowerbeyii – Swainson, 1840: 334.

Macrodonates odontostomus – Pfeiffer, 1855: 149; Pilsbry 1901: 31, pl. 13, figs. 85–87.

Odontostomus (Macrodonates) Jörgensenianus – Holmberg, 1912b: 153, figs. 11–13.

Odontostomus (Euodontostomus) joergensenianus – Holmberg, 1912b: 153.

Macrodonates thielei – Pilsbry, 1930: 360, pl. 31, fig. 1.

Macrodonates odontostomus jorgensenianus – Parodiz, 1942b: 338, pl. 3, fig. 24.

Odontostomus odontostomus jorgensenianus – Parodiz, 1957b: 29; Fernández, 1973a: 119.

Odontostomus (Euodontostomus) jorgensenianus – Breure, 1974b: 117.

Odontostomus (Odontostomus) gargantua – Quintana, 1982: 98.

Odontostomus gargantua – Breure & Schouten, 1985: 22; Breure & Ablett, 2011: 30, fig. 24 A–D i.

Type Locality: “Rio de Janeiro”.

Type Material: possible syntypes NHMUK 20100632.

Distribution: Paraguay; Brazil; Argentina, *Misiones Prov.*, Cainguás Dept., Dos de Mayo (IFML 11213); Candelaria Dept., Cerro Corá (MLP 9579), Colonia Bonpland (MACN-In 1515); Iguazú Dept., Puerto Aguirre (IFML 073); Guaraní Dept., El Soberbio (IFML 11214); Oberá Dept., Oberá (MACN-In 36895).

Remarks

Odontostomus jorgensenianus (Holmberg, 1912), cited for Argentina by Parodiz (1957b) and Fernández (1973a), is synonymous of *O. gargantua* (Férussac) because of its shell morphology and size, a synonymy previously established by Quintana (1982). Anatomy of this species is unknown.

Genus *Pilsbrylia*
Hylton Scott, 1952

Type Species: *Pilsbrylia paradoxa* Hylton Scott [original designation].

Geographic Distribution: Argentina.

Pilsbrylia paradoxa
Hylton Scott, 1952

Pilsbrylia paradoxa Hylton Scott, 1952: 6, pl. 1, fig. 2; – Parodiz, 1957b: 29; Weyrauch, 1964: 59; Fernández, 1973a: 145; Breure, 1974b: 120; Richardson, 1993: 53.

Type Locality: “Las Capillas, Jujuy”.

Type Material: holotype MLP 11337, paratypes MLP 11334(1), MLP 11335(2), MLP 11336(5).

Distribution: Argentina, *Salta Prov.*, Güemes Dept., route 9 (IFML 15761, IFML 832); La Caldera Dept., route 9 (IFML 535, IFML 15231, MACN-In 36894, MACN-In 36890) El Yuto (IFML 951). *Jujuy Prov.* (IFML 15678).

Pilsbrylia hyltonae
Fernández & Rumi, 1980
Fig. 2B

Pilsbrylia hyltonae Fernández & Rumi, 1980: 75, fig. 1–3.

Pilsbrylia hiltoni – Fernández & Rumi, 1984: 219 [incorrect subsequent spelling].

Type Locality: “Cerro Maldonado, Prov. de Salta, Argentina”. Cerro Maldonado is located in Anta Dept.

Type Material: lectotype MLP 3991, paralectotypes MLP 3990 (2) [present designation]. Lectotype: H = 21.3, DM = 7.2, Hap = 7, Dap = 5.1.

Distribution: Argentina, *Salta Prov.*, Anta Dept., El Rey National Park (IFML 15762, MLP 3990, MLP 3991).

Remarks

Fernandez & Rumi designated a “type” and several paratypes in the original species description. However, there is no clear identification of a single specimen as holotype. These two lots contents several specimens later identified as syntypes by an anonymous reviewer. We confirm that these lots are syntypes based on the information provided in the original publication. To avoid the assumption of holotype (Recommendation 73F of the ICZN), a lectotype (MLP 3991) was selected from the syntypes based on their shell measurements coincident with the original description and type locality. The remaining specimens are paralectotypes (MLP 3990).

Pilsbrylia is here considered as a separate genus awaiting a subgeneric revision of *Cyclodontina* (*Bahiensis*).

Genus *Plagiodontes*
Doering, 1875a [1877]

Type Species: *Helix dentata* W. Wood, 1828 [subsequent designation by Pilsbry, 1898a].

Geographic Distribution: Argentina, Uruguay.

Plagiodontes brackebuschii
(Doering, 1877)

Bulimus (*Plagiodontes*) *brackebuschii* Doering, 1875a [1877]: 321; – Doering, 1875b [1877]: 240.

Bulimus (Plagiodontes) brackebuschii – Kobelt, 1878: 133.

Bulimus brakebuschii – Kobelt, 1880: 288, pl. 9, figs. 8–10 [incorrect subsequent spelling].

Odontostomus (Plagiodontes) brackebuschii – Pilsbry, 1901: 99, pl. 14, figs. 10–12; Holmberg, 1912a: 26; Parodiz, 1939: 728, fig. E; 1942b: 340.

Cyclodontina (Plagiodontes) brackebuschii – Parodiz, 1957b: 28.

Scalarinella (Plagiodontes) brackebuschii – Zilch, 1971: 198, pl. 11, figs. 6, 7.

Plagiodontes brackebuschii – Fernández, 1973a: 145; Neubert & Janssen, 2004: 202, pl. 20, fig. 252.

Odontostomus brackebuschii – Breure, 1974b: 112; Richardson, 1993: 44.

Type Locality: “... Sierra de S. Luis, cerca de S. Francisco”.

Type Material: lectotype SMF 9350; paralectotype SMF 9351.

Distribution: Argentina, *Cordoba Prov.*, Pocho Dept., Chancani (MLP 12549, MLP 12550, MLP 12548, MLP 12551); Sobremonte Dept., Minas de Cama Cortada (MLP s/n). *Santiago del Estero Prov.*, Sierra de Guasayán (IFML 769, 1610, MLP 12572).

Plagiodontes daedaleus
(Deshayes, 1851)

Pupa daedalea Deshayes in Férussac & Deshayes, 1851: 217, pl. 162, figs. 23, 24.

Bulimus daedaleus – Pfeiffer in Küster & Pfeiffer, 1852: 194 pl. 56, figs. 11–14; Pfeiffer, 1853: 370; 1855: 149; Hidalgo, 1870: 51; Kobelt, 1880: 286, pl. 9, figs. 1–7.

Bulimus (Odontostomus) daedaleus – Doering, 1874b [1875]: 453.

Odontostomus daedaleus – Doering, 1874c [1875]: 198.

Bulimus (Plagiodontes) daedaleus – Doering, 1875b [1877]: 239; Kobelt, 1878: 133; Doering, 1878: 320.

Odontostomus (Plagiodontes) daedaleus – Pilsbry, 1901: 97, pl. 14, figs. 1, 2, 8; – Parodiz, 1939: 721, fig. A, B; 1942b: 340.

Odontostomus (Plagiodontes) daedaleus var. *major* – Doering, 1875b [1877]: 239; 1875a [1877]: 320; Pilsbry, 1901: 99, pl. 14, figs. 6, 7.

Odontostomus (Plagiodontes) daedaleus var. *salinicola* – Doering, 1875b [1877]: 240; Pilsbry, 1901: 98, 99.

Odontostomus (Plagiodontes) daedaleus var. *minor* – Pilsbry, 1901: 99, pl. 14, figs. 4, 5; Parodiz, 1939: 721.

Odontostomus (Plagiodontes) daedaleus var. *multidentatus* – Pilsbry, 1901: 99, pl. 14, fig. 9.

Plagiodontes daedaleus costatus – Hylton Scott, 1952: 16, pl. 2, fig. 1; Fernández, 1973a: 148.

Cyclodontina (Plagiodontes) daedalea – Parodiz, 1957b: 28.

Plagiodontes daedaleus – Fernández, 1973a: 146; Cazzaniga & Fernández Canigia, 1985: 38; Richardson, 1993: 53; Neubert & Janssen, 2004: 217, pl. 20, figs. 250, 251.

Plagiodontes dealdalea – Breure & Schouten, 1985: 16, fig. 9.

Plagiodontes multidentatus – Neubert & Janssen, 2004: 218, pl. 20, fig. 253 [*partim*].

Plagiodontes daedaleus daedaleus – Pizá & Cazzaniga, 2010: 4, figs. 4, 6–9, 15, 18, 19, 22, 24, 28, 29, 36, 37.

Type Locality: “Brazil”. This type locality given by Deshayes is erroneous, as previously stated by Pilsbry (1901), Parodiz (1939) and Pizá & Cazzaniga (2010). *P. daedaleus* is a common species in central and northwestern Argentina.

Type Material: Not located.

P. daedaleus minor: lectotype SMF 9352; *P. daedaleus major*: lectotype SMF 9353; *P. daedaleus multidentatus*: lectotype SMF 9483; *P. daedaleus costatus*: paratype IFML 733/1.

Distribution: Argentina, *Catamarca Prov.* (IFML 15746), El Totoral (IFML 777, IFML 15750), Ambato Dept., Rodeo (IFML 431, IFML 431), El Alto Dept., Guayampa (IFML 448), El Alto (IFML 450); Belén Dept., El Durazno (IFML 7778), Huaycama (IFML 15744). *Cordoba Prov.*, Calamuchita Dept., Embalse (IFML 1277); Cosquin Dept., Mina don Rodolfo (IFML 999); Cruz del Eje Dept., Villa de Soto (MLP 6693); El Totoral Dept., Villa El Totoral (IFML 14754); Ischilín Dept., Copacabana (MLP s/n), Rio Seco (MACN-In 29381), Los Pozos (MACN-In 13240), Punilla Dept., Carlos Paz (MACN-In 26589), La Falda (MACN-In 23555, MACN-In 1874), Pampa de Olaen (MLP 9736), Rio Cuarto Dept., Corte Barrancas (IFML 109); San Javier Dept., Yacanto (IFML 14780), Santa María Dept., Alta Gracia (MACN-In 14204, MACN-In 11755, MACN-In 14212, MACN-In 25950), Totoral Dept.,

Macha (IFML24, IFML 15742). *Salta Prov.*, Cafayate Dept., Santa Bárbara (IFML 42); La Candelaria Dept. (IFML 15756), Unquillo (IFML 124); Anta Dept., del Valle River (IFML 221). Santiago del Estero Prov., Pellegrini Dept., Cerro del Remate (IFML 43). *Tucuman Prov.*, Burruyacú Dept., Alto de Medina (IFML 528), Río Nio (IFML 6135, IFML 15748); Trancas Dept., six kilometers from San Pedro de Colalao (IFML 868), on the way to El Jardín (IFML 11308), Agua Rosada (IFML 430), three kilometers from San Pedro de Colalao (IFML 15754), El Nogalito (IFML 821, IFML 15752), San Pedro de Colalao (IFML 14207).

Plagiodontes dentatus
(W. Wood, 1828)

- Helix sowerbyana* Férussac, 1821: 2; – d'Orbigny, 1835: 22 (*nomen nudum*).
Helix dentata W. Wood, 1828: 50, pl. 8, fig. 71; – Coan & Petit, 2011: 51.
Cyclodontina sowerbyana – Beck, 1837: 88.
Cyclodontina brasilian – Beck, 1837: 88.
Pupa sowerbyana – d'Orbigny, 1837 [1834–1847]: pl. 41, fig. 15; 1838: 321.
Pupa labyrinthus Anton, 1839: 47 (*nomen nudum*).
Bulimus dentatus – Pfeiffer, 1848: 86, 87; 1853: 369; 1855: 149; 1859: 438; – Hidalgo, 1870: 80; Pfeiffer, 1877: 107; Reeve, 1849: 38, fig. 233.
Pupa dentata – Deshayes in Férussac & Deshayes, 1851: 218, pl. 218, fig. 20, pl. 162, figs. 17, 18; Breure, 1974b: 115.
Odontostomus dentatus – Martens, 1868: 207; Strobel, 1874: 17.
Bulimus (Odontostomus) dentatus – Doering, 1874c [1875]: 197; 1874b [1875]: 452.
Bulimus (Plagiodontes) dentatus – Doering, 1875a [1877]: 319; Kobelt, 1878: 133.
Plagiodontes dentatus – Doering, 1881: 69; Breure, 1974b: 110; Fernández, 1973a: 148; Pizá & Cazzaniga, 2003: 6, figs. 6, 8, 14; 2009: 1452, figs. 17, 18–20.
Odontostomus (Plagiodontes) dentatus – Pilsbry, 1901: 94, pl. 14, figs. 15–17, pl. 15, fig. 25; Parodiz, 1939: 715, fig. G; 1942b: 340.
Odontostomus (Plagiodontes) teisseirei Marshall, 1931: 718.
Cyclodontina (Plagiodontes) dentata – Parodiz, 1957b: 28.
Plagiodontes dentata – Breure & Ablett, 2011: 15, fig. 25 A–D i.

Type Locality: Montevideo, Uruguay. Locality fixed by Klappenbach & Olazarri (1973).

Type Material: syntypes NHMUK 1840.9.12.50(2).

Distribution: Uruguay; Argentina, *Buenos Aires Prov.*, Bahía Blanca (MLP 2534, MLP 36085), Punta Piedras (MLP 9754, MACN-In 14739, MACN-In 14514, MACN-In 9713). *Entre Ríos Prov.*, Colón Dept., Colón (MLP 9751); Gualeguaychú Dept., Gualeguaychú (MLP 9749, MLP 36087, MLP 9756); Tala Dept., Gobernador Echagüe (MLP 1609, MLP 16670); Uruguay Dept., Concepción del Uruguay (MLP 9752, MLP 9750); Victoria Dept., Victoria (MLP 36084, MLP 2340, MLP 12648).

Plagiodontes multiplicatus
(Doering, 1874b [1875])

- Bulimus (Odontostomus) multiplicatus* Doering, 1874c [1875]: 196; – Doering, 1874b [1875]: 452; Kobelt, 1876: 5.
Bulimus multiplicatus – Pfeiffer, 1877: 612.
Odontostomus (Plagiodontes) multiplicatus – Pilsbry, 1901: 101.
Odontostomus multiplicatus – Holmberg, 1912a: 25.
Odontostomus (Plagiodontes) multiplicatus – Parodiz, 1939: 718, fig. C; 1942b: 340.
Cyclodontina (Plagiodontes) multiplicatus crassus Hylton Scott, 1948a: 236.
Plagiodontes multiplicatus parvus Hylton Scott, 1952; – Fernández, 1973a: 152; Pizá & Cazzaniga, 2009: 1458, figs. 17, 19, 21.
Cyclodontina (Plagiodontes) multiplicata – Parodiz, 1957b: 28.
Cyclodontina (Plagiodontes) multiplicata parva – Parodiz, 1957b: 28.
Cyclodontina (Plagiodontes) multiplicata crassa – Parodiz, 1957b: 28.
Plagiodontes multiplicatus crassus – Fernández, 1973a: 151; Pizá & Cazzaniga, 2009: 1434.
Plagiodontes multiplicatus – Fernández, 1973a: 150; Breure, 1974b: 119; Pizá & Cazzaniga, 2003: 9, figs. 7, 10, 12, 15; 2006: 93; 2009: 1437.

Type Locality: "... Cerro de Chepe, en la provincia de la Rioja". The Cerro de Chepe is located in Rosario Vera Peñaloza Dept., in La Rioja province.

Type Material: Not located.

Distribution: Argentina, *Catamarca Prov.* (MLP 9759, MACN-In 25748, MACN-In 9843, MLP 9772), Andalgalá Dept. (MLP s/n); Concep-

ción Dept., Chumbicha (MACN-In 9429, MACN-In 9229, MLP 12567); Paclín Dept, La Merced (MACN-In 15709), La Viña, (MLP 1285). *Cordoba Prov.* (MLP 36034), Colón Dept., Unquillo (MLP 9769), Cruz del Eje Dept. (MLP 1626, MACN-In 1637); Ischilín Dept., Quilino (MLP 36063, MLP 1585); Punilla Dept., Cosquín (MLP 12559); Río Seco Dept., Cerro Colorado (MLP 36077, MLP 1319); Tulumba Dept., Lucio Mansilla (MLP 1621), San José de la Dormida (MLP 9768). *La Rioja Prov.* (MLP 9758); Quebrada de la Cébila (MLP 9764), Capital Dept. (MLP 1583); General. Belgrano Dept., Alta Oita (MACN-In 18324, MACN-In 24392); General Ocampo Dept., Ambil (MLP 36081, MLP 36071, MLP 1580); Rosario Vera Peñaloza Dept., Chepes (MLP 9760),. *Santiago del Estero Prov.*, Sierra de Guasayán (MACN-In 25845), Colonia Victoria (MLP 9765), Banda Dept., Negra Muerta (MLP 36082); Quebrachos Dept., Sumampa (MACN-In 25850); Río Hondo Dept., Río Hondo (MACN-In 6239), Sarmiento Dept., Villa Matará (MLP 38069, MACN-In 18250).

Remarks

Plagiodontes multiplicatus parvus Hylton Scott, 1952, and *Plagiodontes multiplicatus crassus* (Hylton Scott, 1948) are two published subspecies and were considered as valid biological units by Pizá & Cazzaniga. The type locality *Plagiodontes m. crassus* is “India Muerta, Asusques, Santiago del Estero prov.” (paratypes MLP 11346) and the type locality of *P. m. parvus* (holotype MLP 11348; paratype MLP 11343) is “Cerro Colorado, Salta, Argentina”.

Plagiodontes patagonicus
(d’Orbigny, 1835)

Helix patagonica d’Orbigny, 1835: 22; – Breure, 1974b: 120.

Cyclodontina patagonica – Beck, 1837: 88.

Pupa sowerbyana var. *patagonica* – d’Orbigny, 1838 [1834–1847]: 321.

Bulimus patagonicus – Pfeiffer, 1859: 438.

Bulimus dentatus var. *patagonicus* – Strobel, 1874: 18.

Bulimus (*Odontostomus*) *patagonicus* – Doering, 1874b [1875]: 453.

Bulimus (*Plagiodontes*) *patagonicus* – Doering, 1875a [1877]: 321; 1875b [1877]: 240; Kobelt, 1878: 133.

Plagiodontes patagonicus – Doering, 1881: 68; Breure, 1975: 1159, pl. 5, fig. 4, pl. 10, fig. 4; Cazzaniga, Pizá & Ghezzi, 2005: 2203, figs. 2, 6–9; Pizá & Cazzaniga, 2009: 1461, figs. 18, 22.

Odontostomus (*Plagiodontes*) *iheringi* – Pilsbry & Vanatta in Pilsbry, 1898b: 473.

Odontostomus (*Plagiodontes*) *patagonicus* – Pilsbry, 1901: 95, pl. 14, figs. 20–24; – Parodiz, 1939: 720, fig. F; 1942b: 340; Richardson, 1993: 56.

Cyclodontina (*Plagiodontes*) *patagonicus magnus* Parodiz, 1957b: 28.

Plagiodontes patagonicus magnus – Fernández, 1973a: 152.

Plagiodontes magnus – Cazzaniga & Fernández Carnigia, 1985: 44.

Type Locality: “Patagonia”.

Type Material: lectotype MNHN 21096; paralectotypes MNHN 21097(1), NHMUK 1854.12.4.235 (5).

Distribution: Argentina, *Buenos Aires Prov.*, Argerich (MLP 9774), Bahía Blanca (MACN-In 34945, MLP 6631, MLP 9775), Cural Malal (MLP 1561), Pigüe (MLP 3046), ruta Nacional 33 (MACN-In 34944, MLP 6628), Sauce Chico (MLP 1574), Sierra de la Ventana (MLP 9776, MLP 9773). *Rio Negro Prov.*, El Fuerte (MLP 3054).

Plagiodontes rocae
Doering, 1881

Plagiodontes rocae Doering, 1881: 65, pl. 1, figs. 5, 6; – Pilsbry, 1901: 97, pl. 14, figs. 18, 19.

Odontostomus (*Plagiodontes*) *rocae* – Parodiz, 1939: 718; 1942b: 340.

Cyclodontina (*Plagiodontes*) *rocae* – Parodiz, 1957b: 28.

Plagiodontes rocae – Fernández, 1973a: 153; Breure, 1974b: 122; Pizá & Cazzaniga, 2006: 93, figs. 6–9, 11; 2009: 1463, figs. 16, 18, 23, 24.

Type Locality: “... falda meridional de la sierra de Currumalan ...”. The Sierra de Cura Malal is located in Buenos Aires Prov.

Type Material: Not located.

Distribution: Argentina, *Buenos Aires Prov.*, Sierra de Cura Malal (MACN-In 14199, MACN-In 11084, MLP 12564); Sierra de la Ventana (MACN-In 9844).

Plagiodontes strobilii
(Doering, 1875a [1877])

Bulimus (*Odontostomus*) *daedaleus* var. *major* Strobil, 1874: 16 (subspecific name; *non B. daedaleus major* Pfeiffer, 1853); – Pilsbry, 1901: 98 (partim).

Bulimus (*Plagiodontes*) *daedaleus* var. *strobilii* Doering, 1875a [1877]: 320 (replacement name for var. *major* Strobil, 1874; subspecific name); – Doering, 1875b [1877]: 239; Kobelt, 1878: 133.

Bulimus (*Plagiodontes*) *daedaleus* var. *salinicola* Doering, 1875b [1877]: 240; – Doering, 1875a [1877]: 321.

Odontostomus (*Plagiodontes*) *daedaleus* var. *salinicola* – Kobelt, 1878: 133; Pilsbry, 1901: 99.

Cyclodontina (*Plagiodontes*) *daedalea major* – Parodiz, 1939: 721 (partim); 1957b: 28 [partim].

Cyclodontina (*Plagiodontes*) *daedalea minor* – Parodiz, 1939: 721 (partim); 1957b: 28 (partim).

Scalarinella (*Plagiodontes*) *daedaleus strobilii* – Zilch, 1971: 199, pl. 11, fig. 12.

Bulimus (*Odontostomus*) *daedaleus major* – Breure, 1974b: 118.

Plagiodontes daedaleus major – Fernández, 1973a: 147 (partim); Richardson, 1993: 54 (partim).

Plagiodontes strobilii – Neubert & Janssen, 2004: 230, pl. 20, fig. 254; Pizá & Cazzaniga, 2010: 17, figs. 10–14, 20, 21, 25, 26, 30, 31, 38, 40.

Type Locality: "... Cerro de Yerba Buena, en la S. De Aconjigasta ...". The Sierra de Aconjigasta is located in Pocho Dept., in Córdoba province.

Type Material: lectotype SMF 25351.

Distribution: Argentina, *Cordoba Prov.*, West slope of Sierra Grande and Sierra de Comechingones, between Salsacate and Tanginga (IFML 15733). *San Luis Prov.*, Central and northern, San Martín (IFML 15740), 20 kilometers from Santa Rosa (IFML 15729), cerros del Rosario (IFML 15736). *Santiago del Estero Prov.*, Sierra de Guasayán (IFML 15738, IFML 15731).

Plagiodontes weyenberghii
(Doering, 1875a [1877])

Bulimus (*Plagiodontes*) *weyenberghii* Doering, 1875a [1877]: 322; – Doering, 1875b [1877]: 241 (*lapsus calami*); Kobelt, 1878: 133.

Bulimus weyenberghii – Kobelt, 1880: 289, pl. 9, figs. 11, 12; Breure 1974b: 126.

Odontostomus (*Plagiodontes*) *weyenberghii* – Pilsbry, 1901: 100, pl. 14, figs. 13, 14; Holmberg, 1912a: 25.

Odontostomus weyenberghi – Parodiz, 1939: 728, fig. D [incorrect subsequent spelling].

Odontostomus (*Plagiodontes*) *weyenberghii* – Parodiz, 1942b: 340.

Cyclodontina (*Plagiodontes*) *weyenberghii* – Parodiz, 1957b: 28.

Plagiodontes weyenberghii – Hylton Scott, 1965: 24.

Scalarinella (*Plagiodontes*) *weyenberghii* – Zilch, 1971: 199, pl. 11, fig. 12.

Plagiodontes weyenberghii – Fernández, 1973a: 154.

Plagiodontes weyenberghii minor – Fernández, 1973a: 154.

Plagiodontes weyenberghii – Breure & Schouten, 1985: 17, figs. 10, 11.

Odontostomus weyenberghii – Richardson, 1993: 52.

Plagiodontes weyenberghii – Neubert & Janssen, 2004: 235, pl. 20, fig. 255; Pizá & Cazzaniga, 2012: 390, figs. 1–3, 6–7, 9–13.

Type Locality: "...Sierra de Aconjigasta...quebradas del "Nieve" y "Mermela"...". The Sierra de Aconjigasta is located in Pocho Dept., in Córdoba province.

Type Material: lectotype SMF 9354; paralectotype SMF 9355.

Distribution: Argentina, *Cordoba Prov.*, Ongamira (MLP 12555), Gral. San Martín Dept., Villa María (MLP 9833), Pocho Dept., Chancani (MLP s/n), Sierra de Pocho (MLP 13375), Punilla Dept., Capilla del Monte (MLP 2380, MLP 9829), Sobremonte Dept., Chuña Huasi (MLP 9835), San Francisco del Chañar (MLP 12569).

Remarks

Doering (1875) probably made a mistake in writing the species name *weyenberghii*, using an "m" instead of an "n". He not only worked at the same place but personally knew Dr. H. Weyenberg to whom the species is dedicated. For this reason, in accord with previous authors, we considered that this name represents a *lapsus calami*, an error made by the author in writing or misspelling the species name.

Plagiodontes weyrauchi
Pizá & Cazzaniga, 2009

Plagiodontes weyrauchi Pizá & Cazzaniga, 2009: 1438, figs. 4–11.

Type Locality: “Cuesta de la Chilca, 22 km to de East of Andalgalá on the Provincial Road 48 (27°38’19”S, 66°10’27”W), 1455 m about sea level, Catamarca province, Argentina”.

Type Material: holotype MACN-In 37465; paratypes MACN-In 37466 (5), MLP 12673 (3), MLP 12674 (2), IFML 15145 (3); IFML 15145A (2).

Distribution: Argentina, *Catamarca Prov.*, Andalgalá Dept., Cuesta de la Chilca (IFML 15751, IML 640), Aguas de las Palomas (IFML 15749). *Tucuman Prov.*, Trancas Dept., Vapos (IFML 645).

Remarks

Weyrauch cited and wrote on several material labels the name *Plagiodontes pusillus*. However, he never published this name, so it remains unavailable. *Plagiodontes multiplicatus elongatus* Weyrauch is also a *nomen nudum* commonly found on labels handwritten by W. Weyrauch, which Pizá & Cazzaniga (2009) pointed out in describing *Plagiodontes weyrauchi*.

Genus *Spixia*
Pilsbry and Vanatta, 1898

Type Species: *Spixia striata* (Wagner in Spix, 1827) (subsequent designation).

Geographic Distribution: Argentina, Bolivia, Brazil, Paraguay, Uruguay.

Remarks

In 1835 d’Orbigny created *Helix spixii* with two varieties, *minor* and *major*, but did not provide any descriptions, so the names were not available in 1835. In 1837 [1834–1847], d’Orbigny relocated *Helix spixii* in *Pupa*, providing a description of *Pupa spixii* var. *major* (almost smooth, bearing four aperture teeth, shell large and occurring in Bolivia and Corrientes, between the limits of Argentina and Paraguay) and *Pupa spixii* var. *minor* (shell bearing five aperture teeth, lower shell length and distributed

in Chiquitos, Bolivia and northwestern Argentina). Unfortunately, d’Orbigny never selected a nominotypical variety (now subspecies), and *minor* and *major* were very different from each other. d’Orbigny (1837, 1838 [1834–1847]) indicated that *Clausilia striata* Wagner in Spix, 1827, was a synonym of *Pupa spixii*. Pilsbry (1901) decided that *Helix spixii* of d’Orbigny (1835) was based solely upon *Clausilia striata*, which is synonymous of *H. spixii* var. *major*, but not of *H. spixii* var. *minor*, which is substantially different. However, when Pilsbry & Vanatta (1898) created the subgenus *Spixia*, they indicated that *Odontostomus (Spixia) spixii* (= *wagneri* Spix) was the type species of the subgenus, but did not mention the varieties. Pilsbry (1901) and later Parodiz (1942) continued with the use of *Odontostomus (Spixia) spixii* as the type species of the formerly subgenus *Spixia*, arguing that *striata* was preoccupied. Later, Breure & Schouten (1985) clarified that the specific name *striata* is not preoccupied, as has already been noted by Parodiz (1942a), and therefore there is no reason to give preference to the name *spixii* over *striata*. Breure & Ablett (2012) designated a lectotype for each subspecies, *S. spixii major* and *S. spixii minor*, and elevated the latter subspecies to species rank in the genus *Cyclodontina*.

Spixia achalana
(Doering, 1875a [1877])

Bulimus (Odontostomus) achalanus Doering, 1875a [1877]: 324; – Doering, 1878: 134.

Bulimus (Odontostomus) popanus Doering, 1875a [1877]: 325; – Doering, 1878: 134.

Odontostomus (Spixia) achalanus – Pilsbry, 1901: 78; Parodiz, 1942b: 326, fig. 13.

Odontostomus (Spixia) popanus – Pilsbry, 1901: 77; Parodiz, 1942b: 328.

Cyclodontina (Spixia) achalana – Parodiz, 1957b: 27.

Cyclodontina (Spixia) popana – Parodiz, 1957b: 27.

Scalarinella (Spixia) achalana – Zilch, 1971: 199, pl. 12, fig. 16.

Scalarinella (Spixia) popana – Zilch, 1971: 202, pl. 12, fig. 18.

Spixia achalana – Fernández, 1973a: 122.

Spixia popana – Fernández, 1973a: 134.

Odontostomus achalanus – Breure, 1974b: 111.

Odontostomus popanus – Breure, 1974b: 121.

Spixia achalana – Neubert & Janssen, 2004: 197, pl. 18, fig. 219.

Type Locality: "Sierra de Achala (Quebrada de Musi)". This locality is located in Argentina, Cordoba Prov.

Type Material: lectotype SMF 9333a; paralectotypes SMF 9333b (4), MLP 11457 (2).

Bulimus (Odontostomus) popanus: lectotype SMF 9349.

Distribution: Argentina, *Cordoba Prov.*, Cerro San Vicente (IFML 15741), Pocho Dept., Sierra de Pocho (SMF 9349/1, IFML 15370 A), Quebrada de Musi (ZSM s/n); Punilla Dept., Capilla del Monte (MLP 10251); Totoral Dept., Los Mistoles (MACN-In 14842); Ischilín Dept., Deán Funes (MACN-In 9226/31); San Alberto Dept., Sierra de Achala (SMF 9333 a, SMF 9333b ZMB 28505, ZSM s/n, MLP 11457); Santa María Dept., Malagueño (FMNH 107158).

Spixia aconjigastana
(Doering, 1875a [1877])

Bulimus (Odontostomus) aconjigastanus Doering, 1875a [1877]: 326; – Doering, 1875b [1877]: 245; 1878: 134.

Odontostomus (Spixia) aconjigastanus – Pilsbry, 1901: 76; Parodiz, 1942b: 209, pl. 4, fig. 34.

Cyclodontina (Spixia) aconjigastana – Parodiz, 1957b: 27.

Spixia aconjigastana – Hylton Scott, 1965: 24; Fernández, 1973a: 122; Breure & Schouten, 1985: 11, fig. 4.

Scalarinella (Spixia) aconjigastana – Zilch, 1971: 200.

Odontostomus aconjigastanus – Breure, 1974b: 111.

Spixia aconjigastanus – Neubert & Janssen, 2004, 197, pl. 18, fig. 225.

Type Locality: Not mentioned by either Doering (1875a [1877]) or Doering (1875b [1877]). Pilsbry (1901) stated that the type locality of this species is *Sierra de Aconjigasta*.

Type Material: lectotype SMF 9339a; paralectotypes SMF 9339 (7), SMF 29321 (20).

Distribution: Argentina, *Cordoba Prov.* (ZMB s/n), La Toma (IFML 15727), Colón Dept., Unquillo (ZSM 10404, FLMNH 109753, ANSP 226045, MLP 1488); Ischilín Dept., Deán Funes (FMNH 50783); Jesus María Dept., Jesus María (MACN-In 9373); Pocho Dept., Sierra de Mojigasta (SMF 9339 a, b/5, SMF 9339c/3, FMNH 31430), Sierra de Pocho (IFML 15739),

Chancani (MLP 10289, MLP 10254); Punilla Dept., Capilla del Monte (IFML 15215 A, IFML 15725).

Spixia albostrata
Fernández, 1971

Spixia albostrata Fernández, 1971: 58, pl. 1 figs. 4–8, pl. 2 figs. 3, 4; – Fernández, 1973a: 123.

Type Locality: "Casas Viejas, Cordoba".

Type Material: holotype MLP 35104.

Distribution: Argentina, *Cordoba Prov.*, Colón Dept., Cabana (IFML 15737); Punilla Dept., Cosquín (MACN-In 1649), from Capilla del Monte to San Marcos Sierras (IFML 15300 A).

Spixia alvarezii
(d'Orbigny, 1835)

Helix alvarezii d'Orbigny, 1835: 22; – Breure, 1974b: 111.

Bulimus alvarezii – d'Orbigny, 1838 [1834–1847]: 319; Pfeiffer, 1848: 139.

Bulimus (Odontostomus) alvarezii – Doering, 1874b [1875]: 454; 1874c [1875]: 193.

Bulimus (Odontostomus) leptodon Martens, 1875: 276; – Pfeiffer, 1876: 107.

Odontostomus (Spixia) alvarezii – Pilsbry, 1901: 84; Parodiz, 1942a: 202, pl. 2, fig. 10.

Odontostomus (Spixia) leptodon – Pilsbry, 1901: 74; Parodiz, 1942a: 196.

Cyclodontina (Spixia) alvarezii – Parodiz, 1957b: 25.

Spixia alvarezii – Fernández, 1973a: 123 [incorrect subsequent spelling].

Spixia alvarezii – Richardson, 1993: 57.

Type Locality: "provincia Entre-Riosensi (Republica Argentina)". In 1837 (1834–1847) d'Orbigny added "Nous l'avons rencontré sur les coteaux qui bordent le Rio Parana, près du village de *Feliciano*, province d'Ente-rios (république Argentine)".

Type Material: Not located.

Distribution: Argentina, *Cordoba Prov.*, Colón Dept., Cabana (MCZ 182047), La Calera (MACN-In 478, MACN-In 23122, MACN-In 9226-2, MLP 6696/3, MCZ 235254, MCZ 263563, MCZ 116989), Río Ceballos (MACN-In 1642, MACN-In 2444), Unquillo (ZSM 10405, MACN-In 30168, MACN-In 9226-30); Ischilín Dept., Sarmiento (MLP 10295);

Río Primero Dept., Cuenca de Río Primero (MACN-In 9950); Punilla Dept., Capilla del Monte (FMNH 104431), Cosquín (MLP 10267, MACN-In 17418); Totoral Dept., Sierra de Macha (IFML 15301 A, IFML 15302 A, IFML 15303 A); Tulumba Dept., Cerro Colorado (MLP 2328), from Deán Funes to Tulumba (IFML 15735). *Santiago del Estero Prov.*, Banda Dept., Negra Muerta (MLP 35070); Ojo de Agua Dept., Sumampa (FLMNH 109754).

Spixia bergii
(Doering, 1875a [1877])

Bulimus (Odontostomus) bergii Doering, 1875a [1877]: 327; – Doering, 1875b [1877]: 246, pl. 4; 1878: 134.

Odontostomus (Spixia) bergii – Pilsbry, 1901: 87.

Odontostomus (Spixia) berghi – Parodiz, 1942b: 329, pl. 3, fig. 26 [incorrect subsequent spelling].

Scalarinella (Spixia) bergii – Zilch, 1971: 200, pl. 12, fig. 23.

Spixia berghi – Fernández, 1973a: 124 [incorrect subsequent spelling].

Odontostomus bergii – Breure, 1974b: 112.

Spixia bergii – Richardson, 1993: 57.

Spixia bergii – Neubert & Janssen, 2004: 201, pl. 18, fig. 221.

Type Locality: Doering gave the type locality for each of the four varieties described in this species: “a. Alta Gracia”, “b. Cuesta de S. Antonio (Sierra Chica)”, “c. Cerro Salado (S. de Aconjigasta, pendiente oeste)” and “c. Pozo de Piedra (S. de Aconjigasta, pendiente Oeste)”. All these localities are in Córdoba Prov.

Type Material: lectotype SMF 9346a; paralectotypes SMF 9346 b(5).

Distribution: Argentina, *Córdoba Prov.* (FMNH 126891, FMNH 119095, FLMNH 178678), Calamuchita Dept., Calamuchita (MACN-In 23592), Embalse Río tercero (MLP 1635, MLP 1636); Colón Dept., La Granja (MACN-In 14203, MLP 1597); Cruz del Eje Dept., Quilpo (MZSP 66705); Pocho Dept., Sierra de Mojigasta (ZMB s/n); Punilla Dept., Carlos Paz (IFML 15197 A, IFML 15198 A, MACN-In 26588, MACN-In 9021); Santa María Dept., Alta Gracia (SMF 9346 a, SMF 9346 b/5, MACN-In 14213); Tercero Arriba Dept., (MACN-In 6572). *San Luis Prov.*, Ayacucho Dept., Cortaderas (MACN-In 23549); Junín

Dept., La Quebrada (MACN-In 1635). *La Rioja Prov.*, Sanagasta, Dept., Quebrada de los Sauces (MACN-In 15707).

Spixia cala
(Hylton Scott, 1952)

Cyclodontina (Spixia) cala Hylton Scott, 1952: 12, pl. 2, fig. 2; – Fernández, 1973a: 125.

Cyclodontina (Spixia) cala – Parodiz, 1957b: 25.

Cyclodontina (Spixia) cala – Breure, 1974b: 113.

Spixia cala – Richardson, 1993: 57.

Type Locality: “Copacabana, Córdoba”. Copacabana is located in Ischilín Dept.

Type Material: holotype MLP 11454.

Distribution: Argentina, *Córdoba Prov.*, Ischilín Dept., Copacabana (MLP 11454).

Remarks

This species is only represented by the holotype, a single dry shell.

Spixia champaquiana
(Doering, 1875a [1877])
[new combination]

Bulimus (Odontostomus) champaquianus Doering, 1875a [1877]: 330; – Doering, 1875b [1877]: 249; 1878: 134.

Odontostomus (Spixia) champaquianus – Pilsbry, 1901: 80.

Odontostomus (Spixia) tumulorum champaquianus – Parodiz, 1942a: 196, pl. 2, figs. 11, 14.

Cyclodontina (Spixia) chancanina – Parodiz, 1948: 1, figs. 1–3.

Spixia champaquiana – Hylton Scott, 1971: 76; Fernández, 1973a: 125; Neubert & Janssen, 2004: 203, pl. 18, fig. 231.

Scalarinella (Spixia) champaquiana – Zilch, 1971: 200, pl. 12, fig. 25.

Odontostomus champaquianus – Breure, 1974b: 113.

Type Locality: Doering did not provide a specific type locality but described all the localities where he collected *S. champaquiana*: “Esta especie se halla muy diseminada en la pendiente Sudoeste de la Sierra de Achala ... en la pendiente Este de la Sierra de Aconjigasta cerca de Nono ... en la Quebrada del Río

Mina Clavero, y se extiende hasta el extreme meridional de la Sierra de Achala, donde la recojí también en la Quebrada de Oyada en la Provincia de San Luis”.

Type Material: lectotype SMF 9332a; paralectotypes SMF 9332b (10).

Distribution: Argentina, *Catamarca Prov.*, Capayán Dept., Chumbicha (MACN-In 9229-10), Concepción (MACN-In 17785). *Cordoba Prov.*, Calamuchita Dept. (IFML 15210); Colón Dept., Río Ceballos (IFML 6); Cruz del Eje Dept., From Cruz del Eje to Deán Funes (IFML 15153 A); Minas Dept., Sierra de Guasapampa (MZSP 66187); Punilla Dept., Cuesta Blanca (IFML 15209, IFML 15150 A, MZSP 66713), from Carlos Paz to La Calera (IFML 15151 A, IFML 15152 A), from cruz del Eje to Charbonier (IFML 10892); San Alberto Dept., Sierra de Achala (SMF 9332 a, SMF 9332b, ZSM s/n), Villa Brochero (MLP 10281, MACN-In 1324), Mina Clavero (FMNH 217119, IFML 13519, IFML 15721); San Javier Dept., La Paz (MACN-In 1219, MACN-In 3212, MACN-In 2464, MACN-In 11751, MACN-In 1652). *La Rioja Prov.* (MACN-In 22325), Famatina Dept. (IFML 15232); General Belgrano Dept., Iliar (MLP 10286, FLMNH 109760), Olta (MLP 10474, MCZ 182050); Sanagasta Dept., Quebrada de Los Sauces (MLP 10280), Villa Sanagasta (IFML 15365). *San Luis Prov.*, Junín Dept., Merlo (MLP 10282, MLP 10285).

Spixia chancanina
(Doering, 1875a [1877])

Bulimus (Odontostomus) chancaninus Doering, 1875a [1877]: 329; – Doering, 1875b [1877]: 248; 1878: 134.

Bulimus (Odontostomus) salinicola Doering, 1875a [1877]: 328; – Doering, 1875b [1877]: 247, pl. 4; 1878: 134.

Bulimus chancaninus – Kobelt, 1880: 290, pl. 9, figs. 13, 14.

Odontostomus (Spixia) chancaninus – Pilsbry, 1901: 86, pl. 12, figs. 78, 79.

Odontostomus (Spixia) salinicola – Pilsbry, 1901: 87; Parodiz, 1942b: 330, pl. 3, fig. 23.

Cyclodontina (Spixia) chancanina – Parodiz, 1948:1; 1957b: 27.

Spixia chancanina – Hylton Scott, 1965: 23; Fernández, 1973a: 126.

Scalarinella (Spixia) chancanina – Zilch, 1971: 200, pl. 12, fig. 17.

Scalarinella (Spixia) salinicola – Zilch, 1971: 203, pl. 12, fig. 31.

Spixia salinicola – Fernández, 1973a: 138.

Odontostomus chancaninus – Breure, 1974b: 113.

Odontostomus salinicola – Breure, 1974b: 123.

Spixia chancanina – Neubert & Janssen, 2004: 204, pl. 18, fig. 227.

Type Locality: “... pendiente Oeste de la S. de Aconjigasta.” Parodiz 1957b interpreted that the Sierra de Aconjigasta is Sierra de Pocho in Cordoba, Argentina.

Type Material: lectotype SMF 9328; paralectotypes SMF 207997 (2).

Distribution: Argentina, *Catamarca Prov.* (MACN-In 921), Paclín Dept., La Merced (IFML 15305); Valle Viejo Dept. (IFML 15367 A), El Portezuelo (IFML 15305 A, IFML 15306 A). *Cordoba Prov.* (FLMNH 178679, FLMNH 178684); Colón Dept., Jesus María (MACN-In 23123); Cruz del Eje Dept., between Cruz del Eje and Capilla del Monte (IFML 15368 A), from Cruz del Eje to Deán Funes (IFML 15304 A), San Marcos Sierras (IFML 15360 A, IFML 15372 A), Soto (MACN-In 1658); Pocho Dept., between Las Palmas and Chancani (IFML 10879, IFML 15699), Chancani (MLP 10289), Sierra de Mojigasta (MACN-In 25867, SMF 9329 a, SMF 9329 b, ZMB 28506), Sierra de Pocho (MNCN 1505/42144). *San Luis Prov.*, Ayacucho Dept., Sierra de Quines (MACN-In 15125). *Santiago del Estero Prov.*, Choya Dept., Cerro Ichagón (MACN-In 13970); Ojo de Agua Dept., Ojo de Agua (IFML 15376 A).

Spixia charpentieri
(Grateloup in Pfeiffer, 1850)
[new combination]

Bulimus charpentieri Grateloup in Pfeiffer, 1850: 14; – Pfeiffer, 1851: 14; 1853: 369; 1855: 149; 1859: 436; 1868: 76; Hidalgo, 1870: 52.

Bulimus (Odontostomus) charpentieri – Doering, 1874c [1875]: 188; 1874b [1875]: 455; 1878: 134.

Odontostomus (Spixia) charpentieri – Pilsbry, 1901: 76, pl. 12, figs. 75–77; Parodiz, 1942a: 204, pl. 4, fig. 28.

Cyclodontina (Spixia) charpentieri – Parodiz, 1946a: 7; 1957b: 25.

Spixia charpentieri – Fernández, 1973a: 127.

Bulimus charpentieri – Breure, 1974 b: 113.
Cyclodontina charpentieri – Breure & Ablett,
 2011: 11, fig. 21 G–I ii.

Type Locality: “Cordoba”. Doering later said that the type locality of this species is “western slopes of the Sierra de Cordoba”.

Type Material: syntype NHMUK 20110386.

Distribution: Argentina, *Catamarca Prov.* (MACN-In 25749), Ambato Dept., La Puerta (IFML 15307 A, IFML 15308 A, MACN-In 30751); Andalgala Dept., Choya (MACN-In 25749). *Cordoba Prov.* (NHMUK 1829, MLP 10296, ZMB s/n, ZSM s/n, MACN-In 23143, MACN-In 23143-1, FMNH 17251, FLMNH 178680), Colón Dept., Cabana (MLP 10297), La Calera (FMNH 107156); Punilla Dept., Capilla del Monte (MACN-In 1505/42144, FLMNH 109758); Carlos Paz (IFML 15732, MLP 10294); Santa María Dept., Alta Gracia (MACN-In 25951, FLMNH 109759), from Anisacate to Los Molinos Dam (IFML 554, IFML 15775), La Paisanita (IFML 13513), Pampa de Bosque Alegre (MACN-In 1650); Tulumba Dept., Deán Funes (MZSP 66188), San José de la Dormida (MLP 35056). *San Luis Prov.*, Ayacucho Dept., Luján (MACN-In 23145).

Spixia columellaris
 (Parodiz, 1941)

Odontostomus (Spixia) columellaris Parodiz, 1941: 94, pl. 7, figs. 1, 3, 4, 6, 7; – Parodiz, 1942a: 218, pl. 1, fig. 4.

Cyclodontina (Spixia) columellaris – Parodiz, 1957b: 26.

Spixia columellaris – Fernández, 1973a: 125.

Odontostomus (Spixia) columellaris – Breure, 1974b: 114.

Spixia columellaris – Richardson, 1993: 57.

Type Locality: “Minas de Cobre, province of Cordoba, Argentina”. Minas de Cobre is located in Calamuchita Dept.

Type Material: holotype MACN-In 23107, paratype MACN-In 23107.

Distribution: Argentina, *Cordoba Prov.*, Calamuchita Dept., Minas de Cobre (MACN-In 23107, MACN-In 23107); Cruz del Eje Dept., Quilpo (MACN-In 27292, MLP 10302); Ischilín Dept., Copacabana (MLP 10304, MLP 10303).

Spixia costellifer
 (Haas, 1936)

Odontostomus (Spixia) costellifer Haas, 1936: 152.

Spixia estherae – Fernández, 1971: 54, pl. 1 figs. 1–3, pl. 2 figs. 2, 3 [new synonymy].

Odontostomus costellifer – Breure, 1974b: 114.

Spixia costellifer – Richardson, 1993: 57; Neubert & Janssen, 2004: 206, pl. 19, fig. 245.

Type Locality: “Mina, Hierrazuela, Argentinien”. The type locality is located in Cruz del Eje Dept., Cordoba province.

Type Material: holotype SMF 10072; paratype SMF 10073 (1).

Spixia estherae: holotype and paratypes MLP 35088.

Distribution: Argentina, *Cordoba Prov.*, Cruz del Eje Dept., Cruz del Eje (IFML 28, MLP 1613), from Charbonier to Copacabana (IFML 15730, IFML 11219), from Cruz del Eje to Charbonier (IFML 15726, MLP 10330), from Cruz del Eje to San Marcos Sierras (IFML 15334 A), from San Marcos Sierras to El Sauce (IFML 15728), La Cumbre (MLP 10329), Minas de Hierazuela (SMF 10072, SMF 10075).

Remarks

Spixia estherae is here considered synonymous of *S. costellifer*. Both were described from Cruz del Eje, the same political department of Cordoba Province. They both show the same number of shell whorls, similar shell high and fusiform shape. The teleoconch sculptured in both species with marked axial costules.

Spixia cuezzoe
 Salas Oroño, 2010
 Fig. 2C

Spixia cuezzae Salas Oroño, 2010: 2 [inadvertent error].

Type Locality: “Argentina, Cordoba Prov., Punilla Dept., road to Capilla del Monte to San Marcos Sierra, 30°48’39”S, 64°37’14”W, 944 m”.

Type Material: holotype IFML 15284; paratypes IFML 15285 (7); Cordoba Prov., Capilla del Monte (MLP 1489, MLP 6685), San Marcos Sierra (MLP 10290).

Distribution: Argentina, *Cordoba Prov.*, Cruz del Eje Dept., Cerro de La Cruz (IFML 15351 A), from Capilla del Monte to San Marcos Sierras (IFML 15345 A), San Marcos Sierras (IFML 15289 A, IFML 15332), Villa del Soto (IFML 15375); Minas Dept., from San Carlos to Villa del Soto (IFML 15357 A); Punilla Dept., road from Capilla del Monte to San Marcos Sierras (IFML 15286 A, IFML 15287 A), 1 km to the north of Capilla del Monte (IFML 15288 A). *Salta Prov.*, Metán Dept., Cabra Corral dam (IFML 15169, IFML 15170).

Remarks

The original name of this species is explicitly dedicated to G. Cuezco (Salas Oroño, 2010), but the spelling has, on the basis of the original publication itself an inadvertent error. The correct name for the present species is here corrected and should be *Spixia cuezzoe* instead of *S. cuezzae*. This change represents the unique exception for Art. 32.5 (Dubois, 2010; Dubois et al., 2011).

Spixia doellojuradoi
(Parodiz, 1941)
Fig. 2D

Odontostomus (Spixia) doellojuradoi Parodiz, 1941: 93, pl. 7, figs. 11, 14, 15, 18; – Parodiz, 1942b: 320, pl. 1, fig. 5.

Odontostomus (Spixia) doellojuradoi minor Parodiz, 1941: 94; – Parodiz, 1942b: 322.

Cyclodontina (Spixia) doellojuradoi – Parodiz, 1957b: 26; 1962b: 69.

Spixia doellojuradoi – Fernández, 1973a: 128; – Breure & Schouten, 1985: 12.

Spixia doellojuradoi minor – Fernández, 1973a: 128.

Odontostomus (Spixia) doellojuradoi – Breure, 1974b: 115.

Odontostomus (Spixia) doellojuradoi minor – Breure, 1974b: 119.

Spixia doellojuradoi – Breure & Schouten, 1985: 12, fig. 5, 6; Richardson, 1993: 58; – Salas Oroño, 2007: 4, figs. 4–14.

Spixia doellojuradoi minor – Richardson, 1993: 58.

Type Locality: “Estación Casa Grande (between Cosquín and La Falda), *Cordoba*”.

Type Material: holotype MACN-In 23124; paratype MACN-In 23124 (1).

Distribution: Argentina, *Cordoba Prov.* (MCZ 132860), Calamuchita Dept., El Sauce (IFML 10509); Colón Dept., La Calera (MCZ 235255); Cruz del Eje Dept., Los Sauces (MLP 2341), Quilpo (IFML 15349, MLP 10313, IFML 1210); Ischilín Dept., Copacabana (MLP 10308, IFML 15347 A), Ischilín (IFML 14744 A), near Ischilín (IFML 15361 A); Punilla Dept., Cosquín (IFML 15722, MNCN 1505/42271, FMNH 217132), Molinari (MCZ 263566), Pampas de Olaén (IFML 14788 A, IFML 14789 A, MLP 10276), San Marcos Sierras to Quilpo (IFML 15349 A), Valle Hermoso (IFML 15773 A).

Remarks

Parodiz (1941) described the subspecies *Odontostomus (Spixia) doellojuradoi minor* (holotype MACN-In 13244; paratype MACN-In 13244) with the type locality “Pampa de Pocho, Province of *Cordoba*” for the smaller specimens found in this area.

Spixia dubia
(Hylton Scott, 1948)

Cyclodontina (Spixia) dubia Hylton Scott, 1948a: 235; – Parodiz, 1957b: 26.

Spixia dubia – Fernández, 1973a: 129.

Cyclodontina (Spixia) dubia – Breure, 1974b: 115.

Spixia dubia – Richardson, 1993: 58.

Type Locality: “Cerro Colorado (Sudeste de la provincial de *Salta* proximo a su limite con Tucuman y Santiago del Estero)”. Cerro Colorado is located in Metán Dept.

Type Material: holotype MLP 11456; paratypes MLP 11455, MLP 11457.

Distribution: Argentina, *Salta Prov.*, Metán Dept., Cerro Colorado (MLP 11456, MLP 11457, MLP 11455, MLP 10316, MLP 10315, IFML 15315 A, IFML 847).

Spixia holmbergi
(Parodiz, 1941)

Odontostomus (Spixia) holmbergi Parodiz, 1941: 92, pl. 7, fig. 2; – Parodiz, 1942a: 217, pl. 3, fig. 3.

Cyclodontina (Spixia) holmbergi – Parodiz, 1957b: 27.

Spixia holmbergi – Fernández, 1973a: 129.

Odontostomus (Spixia) holmbergi – Breure, 1974b: 116.

Spixia holmbergi – Richardson, 1993: 58.

Type Locality: “Minas de Cobre, Province of Cordoba”.

Type Material: holotype MACN-In 23105; paralectotypes MACN-In 23106.

Distribution: Argentina, *Cordoba Prov.*, Cruz del Eje Dept., La Calera (MLP 6696), San Marcos Sierras (IFML 15260 A, IFML 15262 A, IFML 15199, IFML 15162 A). *Catamarca Prov.*, Ambato Dept., Puerta de Ambato (MACN-In 6242).

Spixia kobeltiana
(Kobelt, 1880)

Bulimus Kobeltianus Kobelt, 1880: 291, pl. 9, figs. 15, 16.

Odontostomus (Spixia) kobeltianus – Pilsbry, 1901: 86, pl. 12, figs. 80, 81; Parodiz, 1942b: 331, fig. 14.

Cyclodontina (Spixia) kobeltiana – Parodiz, 1957b: 27.

Scalarinella (Spixia) kobeltiana – Zilch, 1971: 200, pl. 12, fig. 27.

Spixia kobeltiana – Fernández, 1973a: 130; Neubert & Janssen, 2004: 214, pl. 18, fig. 226.

Bulimus kobeltianus – Breure, 1974b: 117.

Spixia kobeltiana “Doering” – Richardson, 1993: 58.

Type Locality: Kobelt did not assign a specific type locality to this species. Pilsbry (1901) mentioned that the type locality is “Argentine Republic”. However, the locality of the lectotype is Argentina, San Luis Prov., Sierra de San Luis near San Francisco.

Type Material: lectotype SMF 9325.

Distribution: Argentina, *Córdoba Prov.*, Pocho Dept., Chancani (MLP 10289, MLP 10287, MLP 10288), Macha (MLP 10263), Sierra de Pocho (SMF 92447, SMF 26590, SMF 92447), Soto (MLP 10264); Cruz del Eje Dept., canteras de Quilpo (IFML 15724). *San Luis Prov.*, La Capital Dept., San Francisco (SMF 9325).

Remarks

Kobelt (1880) attributed *Bulimus kobeltianus* to Doering, but the correct author is Kobelt, who first described the species.

Spixia marmorata
(Hylton Scott, 1971)
Fig. 2E

Cyclodontina (Spixia) marmorata Hylton Scott, 1971: 75, fig. 2a.

Spixia marmorata – Fernández, 1973a: 131; Breure, 1974b: 118; Richardson, 1993: 59; Neubert & Janssen, 2004: 216, pl. 18, fig. 222.

Type Locality: “Cerro Colorado, Sudeste de Salta”. Cerro Colorado is located in Metán Dept.

Type Material: holotype MLP 11462; paratypes SMF 220914 (2), MLP 11467 (2), MLP 11468(1), MLP 11465(1), MLP 11466(1), MLP 11460 (2), MLP 11461(2), MLP 11463(1).

Distribution: Argentina, *Salta Prov.*, Metán Dept., Cerro Colorado (MLP 10321).

Remarks

This species is only known from the type locality, a mountain isolated in southern Salta.

Spixia martensii
(Doering, 1874b [1875])

Bulimus (Odontostomus) martensii; Doering, 1874b [1875]: 455; – Doering, 1874c [1875]: 181, pl. 3; 1878: 134.

Bulimus (Odontostomus) martensii – Kobelt, 1876: 6; Pfeiffer, 1877: 610.

Odontostomus (Spixia) martensii – Pilsbry, 1901: 88; Parodiz, 1942b: 323.

Cyclodontina (Spixia) martensii – Parodiz, 1957b: 26.

Scalarinella (Spixia) martensii – Zilch, 1971: 201, pl. 12, fig. 19.

Spixia martensi – Fernández, 1973a: 131 [incorrect subsequent spelling].

Odontostomus martensii – Breure, 1974 b: 118.

Spixia martensii – Neubert & Janssen, 2004: 216, pl. 19, fig. 242; Salas Oroño, 2007: 9, figs. 15–26.

Type Locality: “Cerrillos graníticos cerca de Totoral (Prov. De Cordoba)”.

Type Material: lectotype SMF 9454a; paralectotypes SMF 9454 b, MACN-In 23139.

Distribution: Argentina, *Catamarca Prov.*, Ancasti Dept., La Falda (IFML 1491); Tinogasta Dept., Santa Cruz (MACN-In 23140). *Córdoba*

Prov. (IFML 2001, IFML 10931, MLP 10271), between Ascochinga and La Cumbre (IFML 10906), from Charbonier to Copacabana (IFML 11225); Calamuchita Dept., Embalse Rio Tercero (IFML 15356 A, MLP 1634); Colón Dept., Cabana (MLP 10265, FMNH 36595), La Calera (MLP 6696, MACN-In 478-2), Salsipuedes (MACN-In 24407); Cruz del Eje Dept., road to Maza (IFML 15369 A); Punilla Dept., between Los Cocos and Capilla del Monte (IFML 15769 A), from Capilla del Monte to La Cumbre (IFML 14784), from Capilla del Monte to Los Cocos (IFML 14784 A), Capilla del Monte (MACN-In 13246, IFML 14790 A, IFML 14787 A, IFML 708, IFML 1158, IFML 15701, IFML 15211, IFML 2825, IFML 2441, IFML 15771 A, MACN-In 31615, MACN-In 30683, MLP 10252, MACN-In 19914, MACN-In 14844), Carlos Paz (IFML 706, MLP 10328, IFML 15344 A, MACN-In 14836, MACN-In 13248, MACN-In 1879, MACN-In 11021-1, MACN-In 23134, MACN-In 23136, MACN-In 478-2), Casa Grande (IFML 14786 A, IFML 14791 A), Cosquín (MCZ 116986), La Cumbre (MACN-In 9226-1, MACN-In 9226-33), La Falda (IFML 15700), Los Cocos (IFML 2826, IFML 14785 A, MACN-In 30684, MACN-In 6582), Pampa de Olaen (MACN-In 1664), Valle Hermoso (IFML 15200); Ischilín Dept., camino a Ongamira (IFML 14876 A), Copacabana (MLP 10255), Ischilín (IFML 15702, IFML 763, MLP 3062); Rio Primero Dept., La Puerta (MLP 1592); Santa Maria Dept., Alta Gracia (MACN-In 14837, MLP 10272); Totoral Dept., Los Mistoles (MACN-In 14835); Tulumba Dept., between San Jose de la Dormida and Tulumba (IFML 15371), San Jose de la Dormida (IFML 14797 A). *Salta Prov.*, Metán Dept., near Juramento River (IFML 14792, IFML 15172).

Spixia minor
(d'Orbigny, 1837)
[new combination]

Helix spixii var. *minor* d'Orbigny, 1835: 21 (*nomen nudum*).

Pupa striata – Wagner in Spix, 1827: 19 (*partim*).
Pupa spixii var. *minor* – d'Orbigny, 1837 [1834–1847]: pl. 41, fig. 11; 1838: 320.

Odontostomus (Spixia) spixii var. *minor* – Pilsbry, 1901: 71, pl. 12, figs. 64, 65.

Odontostomus bergi – Boettger & Rolle in Rolle, 1908: 160.

Odontostomus (Euodontostomus) saltensis – Holmberg, 1912b: 151, figs. 9, 10.

Odontostomus (Spixia) spixi minor – Parodiz, 1942a: 201, pl. 2, fig. 9.

Cyclodontina (Spixia) spixii minor – Parodiz, 1957b: 25.

Spixia spixii minor – Fernández, 1973a: 140; Richardson, 1993: 60.

Helix spixii minor – Breure, 1974b: 119.

Spixia striata minor – Breure & Schouten, 1985: 14.

Cyclodontina minor – Breure & Ablett, 2012: 27, fig. 21 A–F i.

Type Locality: [Bolivia] “province de Chiquitos, entre Santo-Corazon et San-Juan”.

Type Material: lectotype and paralectotypes NHMUK 1854.12.4.231.

Distribution: Argentina, *Formosa Prov.*, Estero Bellaco (MLP 10467). *Salta Prov.* (MACN-In 1885, MACN-In 10017, SMF 227231, SMF 227232/2), La Viña Dept., Alemania (IFML 15290 A, MACN-In 30752, MACN-In 17603, MACN-In 583-1, MLP 10466), General Güemes Dept., from Salta to Güemes (IFML 15683), La Candelaria Dept. (MLP 11682), Quebrada de Río Ceibal (IFML 15684), El Tala (FMNH 217164), Capital Dept., Cerro San Bernardo (IFML 208, MACN-In 1370, MACN-In 14776, MACN-In 23133, MLP 10468). IFML 14081, El Infiernillo.

Spixia multispirata
(Doering, 1875a [1877])

Bulimus (Odontostomus) multispiratus Doering, 1875a [1877]: 326; – Doering, 1875b [1877]: 245; 1878: 134.

Odontostomus (Spixia) multispiratus – Pilsbry, 1901: 89; Parodiz, 1942a: 210.

Cyclodontina (Spixia) multispirata – Parodiz, 1957b: 27.

Scalarinella (Spixia) multispirata – Zilch, 1971: 201, pl. 12, fig. 24.

Spixia multispirata – Fernández, 1973a: 132; Neubert & Janssen, 2004: 218, pl. 18, fig. 228.

Odontostomus multispiratus – Breure, 1974b: 119.

Type Locality: “Pendiente Oeste de la Sierra de Aconigasta (Quebrada de Yatan, de Nieve, Agua de los Oscuros)”.

Type Material: lectotype SMF 9327a; paralectotypes SMF 9327 b (2).

Distribution: Argentina, *Córdoba Prov.* (MACN-In 23125 b), Las Aguilas (MZSP 66708); Colón Dept., Unquillo (MACN-In 23126); Cruz del Eje Dept., Media Naranja (MACN-In 1660); Pocho Dept., between Las Palmas and El Cadillo (IFML 15316 A, IFML 15318 A, IFML 15202 A, IFML 15212 A), Chancani (IFML 15317 A), Sierra de Pocho (IFML 15333 A, MLP 10253); Tulumba Dept., Intihuasi (MACN-In 23125).

Spixia olainensis
(Doering, 1874c [1875])

Bulimus (Odontostomus) olainensis Doering, 1874c [1875]: 192; – Doering, 1874b [1875]: 454; 1878: 133.

Bulimus olainensis – Pfeiffer, 1877: 610.

Odontostomus (Spixia) olainensis – Pilsbry, 1901: 79.

Odontostomus (Spixia) pucuranus olainensis – Parodiz, 1942a: 196.

Scalarinella (Spixia) olainensis – Zilch, 1971: 201, pl. 12, fig. 26.

Spixia pucarana olainensis – Fernández, 1973a: 135.

Odontostomus olainensis – Breure, 1974b: 120.

Spixia olainensis – Neubert & Janssen, 2004: 220, pl. 18, fig. 232.

Type Locality: “Pampas de Olain (Sierra de Cordova, a 900 m de altura)”.

Type Material: lectotype SMF 9343.

Distribution: Argentina, *Cordoba Prov.*, Pocho Dept., Sierra de Pocho (MZSP 66709); Punnilla Dept. (SMF 9343).

Spixia parodizi
(Hylton Scott, 1952)
Fig. 2F
[new combination]

Cyclodontina (Spixinella) parodizi Hylton Scott, 1952: 13, pl. 1, fig. 3; – Parodiz, 1957b: 27; Fernández, 1973a: 121; Breure, 1974b: 120.

Type Locality: “Casas Viejas. Prov. de Cordoba”.

Type Material: holotype MLP 11093; paratypes MLP 11094 (4); IFML 731 (1).

Distribution: Argentina, *Córdoba Prov.*, Ischilín Dept., Casas Viejas (IFML 731), Orcosuni (IFML 15309, IFML 15310, IFML 15312).

Spixia paucidentata
Hylton Scott, 1971

Spixia paucidentata Hylton Scott, 1971: 73, figs. 1–3; – Fernández, 1973a: 133; Breure, 1974b: 120; Richardson, 1993: 59; Neubert & Janssen, 2004: 221, pl. 18, fig. 233.

Type Locality: “El Rodeo, Dto. de Tulumba, Cordoba”.

Type Material: paratypes MLP 11469, MLP 11470, MLP 11471, MLP 11472, MLP 11473, MLP 11474, SMF 220913 (4).

Distribution: Argentina, *Córdoba Prov.*, Tulumba Dept., El Rodeo (MLP 11469, MLP 11470, MLP 11471, MLP 11472, MLP 11473, MLP 11474, SMF 220913/4 a).

Remarks

Holotype was not found at Museo de Ciencias Naturales, La Plata and is possibly lost.

Spixia pervarians
(Haas, 1936)

Odontostomus (Spixia) pervarians Haas, 1936: 151; – Parodiz, 1942a: 210.

Cyclodontina (Spixia) pervarians – Parodiz, 1957b: 27.

Spixia pervarians – Hylton Scott, 1967: 102, fig. 8; Fernández, 1973a: 133.

Odontostomus (Spixia) pervarians – Breure, 1974b: 121.

Odontostomus (Spixia) pervarians – Richardson, 1993: 59.

Spixia pervarians – Neubert & Janssen, 2004: 222, pl. 18, fig. 220.

Type Locality: “Sierra de Achala bei Candelaria, Prov. Salta, Argentinien”. There is an mistake with the location of the type locality since Sierra de Achala is located into Cordoba Province, not in Salta province.

Type Material: holotype SMF 10074; paratypes SMF 10075 (2), SMF 10076 (5).

Distribution: Argentina, *Cordoba Prov.*, San Alberto Dept., Sierra de Achala (SMF 10074, SMF 10075, SMF 10076), Cruz del Eje Dept., Quilpo (IFML 1212, MLP 10334, MLP 10331, IFML 15747), Candelaria (MLP 10336), San Gregorio (MLP 10335), Pocho Dept., Mogigasta (MLP 10333).

Spixia philippii
(Doering, 1874c [1875])

Bulimus (*Odontostomus*) *Philippii* Doering, 1874c [1875]: 180, non Pfeiffer, 1842; – Doering, 1874b [1875]: 456; 1878: 135.

Bulimus (*Odontostomus*) *philippii* – Kobelt, 1876: 8.

Bulimus philippii – Pfeiffer, 1877: 612.

Bulimus (*Odontostomus*) *doeringi* – Kobelt, 1878: 135 (new name for *philippii* Doering 1874, non Pfeiffer, 1842).

Odontostomus (*Spixia*) *philippii* – Pilsbry, 1901: 75, pl. 12, figs. 73, 74; Parodiz, 1942a: 205, pl. 4, fig. 29.

Cyclodontina (*Spixia*) *philippii* – Parodiz, 1957b: 26.

Scalarinella (*Spixia*) *philippii* – Zilch, 1971: 201, pl. 12, figs. 21–22.

Spixia philippii – Fernández, 1973a: 133; – Neubert & Janssen, 2004: 223, pl. 19, fig. 241.

Odontostomus philippii – Breure, 1974b: 121.

Type Locality: “... cerrillos graníticos en la llanura cerca del Totoral, al Norte de la Provincia de Cordoba”.

Type Material: syntypes SMF 92441a, SMF 92441b (11), SMF 9345a (19), SMF 9345b (4).

Distribution: Argentina, *Córdoba Prov.*, (MLP 10344, FLMNH 178681, FLMNH 166156); Cruz del Eje Dept., (SMF 92441 a, MACN-In 378, MACN-In 14846, MLP 2406), Estancia La Fronda (IFML 949), Villa de Soto (IFML 10891), Villa del Soto to Cosquín (IFML 10891), La Loma (MACN-In 1639), Quilpo (MLP 10343); Totoral Dept., (MLP 10327), Villa General Mitre (IFML 15745), Villa del Totoral (IFML 15319, IFML 15320, IFML 15321, IFML 14741, IFML 14742, IFML 14759, IFML 12770, IFML 15348, FMNH 36597, FMNH 72230); Ischilín Dept., Ischilín (IFML 15346, IFML 15362); Punilla Dept., (MLP 35047) San Gregorio (MLP 10345), Capilla del Monte (FMNH 17249, FMNH 107154, FMNH 217122, FMNH 217067, MCZ 113841, MCZ 108690); Pocho Dept., Chancani (MLP 10289); Calamuchita Dept., Calamuchita (FMNH 50802). *Catamarca Prov.*, Ambato Dept., La Puerta (MACN-In 6240).

Remarks

Kobelt (1878) proposed the name *Bulimus* (*Odontostomus*) *doeringii* to replace *Odon-*

tostomus philippii Doering, 1874c [1875], which he thought was preoccupied. Pilsbry (1901) clarified that the changed was unnecessary.

Spixia profundidens
(Doering, 1874c [1875])

Bulimus (*Odontostomus*) *profundidens* Doering, 1874c [1875]: 184; – Doering, 1874b [1875]: 455; 1878: 134.

Bulimus (*Odontostomus*) *maculosus* Doering, 1874c [1875]: 186; – Doering, 1874a: 455; 1878: 134.

Bulimus (*Odontostomus*) *profundidens* – Kobelt, 1876: 7.

Bulimus (*Odontostomus*) *maculosus* – Kobelt, 1876: 7.

Bulimus profundidens – Pfeiffer, 1877: 611.

Bulimus maculosus – Pfeiffer, 1877: 611.

Odontostomus (*Spixia*) *profundidens* – Pilsbry, 1901: 81.

Odontostomus (*Spixia*) *maculosus* – Pilsbry, 1901: 78; Parodiz, 1942a: 208, pl. 2, figs. 13, 16.

Cyclodontina (*Spixia*) *tumulorum profundidens* – Parodiz, 1942a: 196; 1957b: 26.

Cyclodontina (*Spixia*) *maculosa* – Parodiz, 1957b: 26.

Scalarinella (*Spixia*) *profundidens* – Zilch, 1971: 202.

Spixia maculosa – Fernández, 1973a: 131.

Odontostomus profundidens – Breure, 1974b: 121.

Odontostomus maculosus – Breure, 1974b: 118.

Spixia profundidens – Neubert & Janssen, 204: 225.

Type Locality: “... Sierra de Achala [Cordoba], cerca de San Carlos, a 600 metros de altura”.

Type Material: lectotype SMF 9336.

Distribution: Argentina, *Cordoba Prov.*, (SMF 208007/1, FMNH 119267, FMNH 31485); San Alberto Dept., Sierra de Achala (SMF 9336), Ischilín Dept., Ischilín (MACN-In 10319), Ongamira (IFML 15155, IFML 15156, IFML 15157, IFML 15158, IFML 15159); Totoral Dept. (ZMB 28504), Santa Catalina (IFML 15160, IFML 15161, IFML 15355), Sierra Chica (MACN-In 30753); Punilla Dept., Capilla del Monte (MLP 10342), Cerro Uritorco (MZSP 66711).

Spixia pucurana
(Doering, 1874c [1875])

- Bulimus (Odontostomus) pucuranus* Doering, 1874c [1875]: 183; – Doering, 1878: 134.
Bulimus (Odontostomus) pucaranus – Doering, 1874b [1875]: 456 [incorrect subsequent spelling]; Kobelt, 1876: 8; 1878: 134.
Bulimus pucaranus – Pfeiffer, 1877: 612.
Odontostomus (Spixia) pucuranus – Pilsbry, 1901: 82; Parodiz, 1942a: 214, pl. 4, figs. 36, 37.
Cyclodontina (Spixia) pucarana – Parodiz, 1957b: 26 [incorrect subsequent spelling].
Scalarinella (Spixia) pucarana – Zilch, 1971: 202, pl. 12, fig. 28 [incorrect subsequent spelling].
Spixia pucurana – Fernández, 1973a: 135; – Neubert & Janssen, 2004: 225, pl. 19, fig. 235.
Odontostomus pucaranus – Breure, 1974b: 121.

Type Locality: “... Valle de Río Primero en la Sierra Chica de Córdoba, pero solamente en las regiones intermedias, graníticas ...”.

Type Material: lectotype SMF 9338a; paralectotypes SMF 9338b (2).

Distribution: Argentina, *Catamarca Prov.*, (IFML 15359). *Cordoba Prov.*, (MACN-In 11763, MACN-In 13247, MACN-In 9226), *Punilla Dept.*, Valle Hermoso (MACN-In 3224), *Río Primero Dept.*, (SMF 9338 a, SMF 9338 b, IFML 385); *Cruz del Eje Dept.*, San Marcos Sierras (IFML 15163). *San Luis Prov.*, Capital Dept., Sierra de San Francisco, (MACN-In 15139); *Ayacucho Dept.*, Sierra de Quines (MACN-In 15124).

Spixia pyrgula
(Hylton Scott, 1952)

- Cyclodontina (Spixia) pyrgula* Hylton Scott, 1952: 8, pl. 1, fig. 2, pl. 2, fig. 3; – Parodiz, 1957b: 26; Breure, 1974b: 122.
Spixia pyrgula – Fernández, 1973a: 136; Breure & Schouten, 1985: 14, fig. 7; Richardson, 1993: 59; Neubert & Janssen, 2004: 226, pl. 19, fig. 238.

Type Locality: “Orcosuni, camino a Dean Funes. Prov. de Cordoba”.

Type Material: holotype MLP 11475; paratypes MLP 10348, MLP 11476, MLP 11477,

MLP 11478, IFML 730, SMF 71806 (8), SMF 164110 (1).

Distribution: Argentina, *Cordoba Prov.*, Ischilín Dept., Orcosuni (SMF 71806/8, SMF 164110, MLP 11745, MLP 11478/2, IFML 730, IFML 15767, MLP 10348/ 6, MLP 11476/2, MLP 11477/6, IFML 15311, MLP 10349, FMNH 72249), *Deán Funes (FMNH 50780)*; *Cruz del Eje Dept.*, Cerro Cuniputo (MACN-In 32860); *Punilla Dept.*, Charbonier (MACN-In 3225).

Spixia pyriformis
(Pilsbry, 1901)

- Bulimus (Odontostomus) Doeringii* Kobelt, 1882: 5, pl. 1, fig. 6a (*non Bulimus doeringii* Kobelt, 1878).
Odontostomus (Spixia) pyriformis Pilsbry, 1901: 72, pl. 12, figs. 71, 72 (new name for *Bulimus (Odontostomus) doeringii* Kobelt, 1882).
Odontostomus (Spixia) pyriformis – Parodiz, 1942a: 216, pl. 1, fig. 6.
Cyclodontina (Spixia) pyriformis – Hylton Scott, 1948a: 230; Parodiz, 1957b: 26.
Scalarinella (Spixia) pyriformis – Zilch, 1971: 202, pl. 12, fig. 34.
Spixia pyriformis – Fernández, 1973a: 136.
Odontostomus pyriformis – Breure, 1974b: 122.
Spixia pyriformis – Richardson, 1993: 59; Neubert & Janssen, 2004: 226, pl. 19, fig. 239; Salas Oroño, 2007: 15, figs. 27–39.

Type Locality: “Argentina: Sierra de Cordova”. Parodiz (1957b) clarified that the type locality was erroneous because this species is not found in Cordoba province and only in Tucuman and Salta provinces, Argentina.

Type Material: lectotype SMF 171579; paralectotype SMF 171580 (1).

Distribution: Argentina, *Salta Prov.*, Metán Dept., Cerro Colorado (IFML 15743, IFML 14793, IFML 14794, SMF 171579, SMF 171580/1, FMNH 217165, FMNH 217164, MCZ 166880), *Sierra Colorada* (IFML 14793, IFML 14795). *La Candelaria* (IFML 15765).

Spixia reticulata
(Doering, 1875b [1877])

- Bulimus (Odontostomus) reticulatus* Doering, 1875b [1877]: 250, pl. 4; 1875a [1877]: 331; 1878: 134.

Odontostomus (Spixia) reticulatus – Pilsbry, 1901: 88.

Odontostomus (Spixia) reticulatus – Parodiz, 1942a: 207, pl. 4, fig. 37.

Cyclodontina (Spixia) reticulatus – Parodiz, 1957b: 27.

Scalarinella (Spixia) reticulata – Zilch, 1971: 202, pl. 12, fig. 29.

Spixia reticulata – Fernández, 1973a: 137.

Odontostomus reticulatus – Breure, 1974b: 122.

Spixia reticulata – Neubert & Janssen, 2004: 227, pl. 18, fig. 229.

Type Locality: “Esta especie puebla la pendiente Este de la Sierra de Aconjigasta, los altos de la Tablada, Plumería, etc”.

Type Material: lectotype SMF 9326a; paralectotypes SMF 325582 (4).

Distribution: Argentina, *Catamarca Prov.*, Fray Mamerto Esquiú Dept., Dique Las Pirquitas (IFML 15322), Gracián (MACN-In 24390). *Cordoba Prov.*, (MACN-In 23114), Pocho Dept., Sierra de Pocho (SMF 9326 a, SMF 9326 b, IFML 15313 A, ZMB 28502); Tulumba Dept., Intihuasi (MACN-In 23115).

Spixia riojana
(Doering, 1874b [1875])

Bulimus (Odontostomus) riojanus Doering, 1874b [1875]: 454; 1878: 133; – Kobelt, 1876: 6.

Bulimus (Odontostomus) riochanus – Doering, 1874c [1875]: 190 [incorrect subsequent spelling].

Bulimus riojanus – Pfeiffer, 1877: 610.

Odontostomus (Spixia) riojanus – Pilsbry, 1901: 83; Parodiz, 1942b: 327, pl. 4, fig. 33.

Odontostomus (Eudontostomus) riojanus – Holmberg, 1912a: 24.

Cyclodontina (Spixia) riojana – Parodiz, 1957b: 27.

Scalarinella (Spixia) riojana – Zilch, 1971: 202, pl. 12, fig. 30.

Spixia riojana – Fernández, 1973a: 137; Neubert & Janssen, 2004: 227, pl. 18, fig. 224.

Odontostomus riojanus – Breure, 1974b: 122.

Type Locality: “Sierra de La Rioja”.

Type Material: lectotype SMF 9337a; paralectotypes SMF 325581 (2), MACN-In 9127 (3).

Distribution: Argentina, *Catamarca Prov.*, El Alto Dept., El Alto (IFML 435). *La Rioja Prov.*, (SMF 9338 a, SMF 9337 b, MACN-In 9127-3, FLMNH 178683), Castro Barros Dept., (IFML 15327, IFML 15418, IFML 15326), Sierra de Velazques (IFML 15366), Santa Cruz (IFML 15325), road to Anillaco (IFML 15326), Sanogasta Dept., Villa Sanogasta (IFML 15335), from Bazán to Anillaco (IFML 15203).

Spixia striata
(Wagner in Spix, 1827)

Pupa striata Wagner in Spix, 1827: 19 (*partim*).
Helix spixii var. *major* d’Orbigny, 1835: 21 (*nomen nudum*).

Pupa spixii var. *major* d’Orbigny, 1838 [1834–1847]: 320.

Cyclodontina striata – Beck, 1837: 88.

Pupa spixii – Gray, 1854: 23 (*partim*).

Bulimus (Odontostomus) striatus – Pfeiffer, 1855: 149; Doering, 1874b [1875]: 424; 1878: 134.

Bulimus striatus Spix – Pfeiffer, 1859: 437.

Odontostomus (Spixia) spixii var. *major* – Pilsbry, 1901: 70, pl. 12, fig. 66.

Odontostomus (Spixia) spixii var. *paraguayanus* – Pilsbry, 1901: 71, pl. 12, fig. 67, pl. 15, fig. 34.

Odontostomus (Spixia) spixii var. *Bohlsi* – Pilsbry, 1901: 70.

Odontostomus (Spixia) spixii major – Parodiz, 1942a: 201.

Cyclodontina spixii major – Parodiz, 1957b: 25.

Spixia spixii major – Fernández, 1973a: 139; Quintana, 1982: 100.

Spixia striata – Breure, 1975: 1158 (*partim*); Breure & Schouten, 1985: 14, fig. 8; Richardson, 1993: 59; Breure & Ablett, 2012: 26.

Type Locality: “... pays habité par les Guarayos, au sein des forêts humides des frontières nord de la province de Chiquitos (république de Bolivie), et dans la province de Corrientes (république Argentine), en un bois voisin de la rivière de Santa-Lucia, au lieu dit “Pasto reito”” (d’Orbigny, 1838 [1834–1847]).

Type Material: lectotype NHMUK 1854.12.4.232; paralectotypes NHMUK 1854.12.4.232 (6).

Distribution: Bolivia; Paraguay; Brazil?; Argentina, *Corrientes Prov.*, Manantiales (MACN-In 9505). Misiones Prov.? Puerto María (MACN-In 23132).

Spixia subsexdentata
(Doering, 1874b [1875])

Bulimus (Odontostomus) subsexdentatus Doering, 1874b [1875]: 454.

Bulimus (Odontostomus) pseudosexdentatus – Doering, 1874c [1875]: 194, pl. 3.

Bulimus (Odontostomus) subsexdentatus – Kobelt, 1876: 6.

Bulimus subsexdentatus – Pfeiffer, 1877: 609.

Odontostomus subsexdentatus – Doering, 1878: 133.

Odontostomus (Spixia) subsexdentatus – Pilsbry, 1901: 85.

Scalarinella (Spixia) subsexdentata – Zilch, 1971: 203.

Odontostomus subsexdentatus – Breure, 1974b: 124.

Spixia subsexdentata – Neubert & Janssen, 2004: 231, pl. 19, fig. 240.

Type Locality: “La variedad normal es frecuente en los cerritos calcáreos cerca del valle del Río Primero, en la pendiente Oeste de la Sierra de Córdoba”. “La var. *major* parece predominar en el Norte de la Provincia ... cerca de San Pedro”. The localities indicated by Doering are located in Córdoba Prov, Argentina.

Type Material: lectotype SMF 9330.

Distribution: Argentina, *Córdoba Prov.* (SMF 9330/1, SMF 164196/3), Colón Dept., Cabana (IFML 762), Unquillo (MACN-In 21785); Río Seco Dept., Sierra de Ambargasta (IFML 15328 A); Punilla Dept., Valle Hermoso (IFML 15330 A); Santa María Dept., Guayacaste (MLP 1615), Pampa Alta (MLP 10278), Río Ceballos (MLP 10269), San Pedro (FMNH 36594); Tulumba Dept., from Deán Funes to Tulumba (IFML 15194), from San José de la Dormida to Tulumba (IFML 15329 A, IFML 15236, IFML 15373 A, IFML 15374 A), Tulumba (IFML 15238, IFML 10907, FMNH 217157). *Santiago del Estero Prov.*, Banda Dept., Negra Muerta (MLP 35070); Guasayán Dept. (MACN-In 25846); Ojo de Agua Dept., Ojo de Agua (MLP 10270).

Spixia tridens
Hylton Scott, 1967

Spixia tridens Hylton Scott, 1967: 101, fig. 7; – Fernández, 1973a: 140; Breure, 1974b: 125; Richardson, 1993: 61; Neubert & Janssen, 2004: 232, pl. 19, fig. 236.

Type Locality: “Quilpo. Córdoba”. Quilpo is located in Cruz del Eje Dept.

Type Material: paratypes MLP 11479(2), MLP 11480, SMF 220915 (1).

Distribution: Argentina, *Córdoba Prov.*, Cruz del Eje Dept., Quilpo (MLP 11479(2), SMF 220915, IFML 15354).

Spixia tucumanensis
(Parodiz, 1941)
Fig. 2G

Odontostomus (Spixia) tucumanensis Parodiz, 1941: 92, pl. 7, figs. 10, 12, 13, 16; – Parodiz, 1942b: 319, pl. 1, fig. 1.

Cyclodontina (Spixia) tucumanensis – Parodiz, 1957b: 27.

Spixia tucumanensis – Fernández, 1973a: 141. *Odontostomus (Spixia) tucumanensis* – Breure, 1974b: 125.

Spixia tucumanensis – Richardson, 1993: 61; Salas Oroño, 2007: 20, figs. 39–49.

Type Locality: “Margins of Río Salí, near Tucuman city, Argentina”.

Type Material: holotype MACN-In 23108; paratypes MACN-In 23109.

Distribution: Argentina, *Tucumán Prov.*, (MLP 35036, MACN-In 21478, MACN-In 18321, MCZ 132861), Trancas Dept. (IFML 15379, IFML 15355 A), between Tapia and Tafí Viejo (MLP 1606, MLP 35036), between Tapia and Vipos (IFML 326, IFML 10837, IFML 11220), El Cadillal (IFML 14201, MLP 10472), from Tapia to Raco (IFML 326, IFML 14774 A, IFML 15204, IFML 15353), India Muerta river (IFML 15350 A, IFML 15207, IFML 15682), Salí river (MACN-In 9700), San Pedro de Colalao (IFML 15340, IFML 10894, FMNH 217127), San Javier (MACN-In 23110), Ticucho (IFML 15757, IFML 15208, IFML 15380), Vipos (IFML 14770, IFML 15341 A, IFML 15352, IFML 14769, IFML 15377, MACN-In 17581, MLP 10471, FMNH 217166, MLP 10473, IFML 10838).

Spixia tumulorum
(Doering, 1874c [1875])

Bulimus (Odontostomus) tumulorum Doering, 1874c [1875]: 187, – Doering, 1874b [1875]: 456; 1878: 134; Pilsbry, 1901: 81.

Bulimus (Odontostomus) tumulorum – Kobelt, 1876: 7.

Bulimus tumulorum – Pfeiffer, 1877: 611.

Odontostomus (Spixia) tumulorum – Parodiz, 1942a: 211, pl. 2, figs. 11–16.

Cyclodontina (Spixia) tumulorum – Parodiz, 1957b: 26.

Scalarinella (Spixia) tumulorum – Zilch, 1971: 203, pl. 12, fig 32.

Spixia tumulorum – Fernández, 1973a: 141; – Neubert & Janssen, 2004: 233, pl. 19, fig. 237.

Odontostomus tumulorum – Breure, 1974b: 125.

Type Locality: "... cerritos de la Calera cerca del pueblo de Córdoba". The locality indicated by Doering is located in Argentina, Córdoba Prov.

Type Material: lectotype SMF 9331a; paralectotypes SMF 325585 (2).

Distribution: Argentina, Córdoba Prov. (SMF 9331 a, SMF 9331 b, FMNH 31459), Calamuchita Dept., Minas de Cobre (MACN-In 23129), San Javier (MACN-In 14852); Colón Dept., La Calera (MACN-In 23128); Cruz del Eje Dept., La Higuera (IFML 15233 A), Serruzuela (IFML 15155, FMNH 156679), Sierra de Mojigasta (IFML 15154 A); Punilla Dept., Charbonier (IFML 11219). La Rioja Prov., Belgrano Dept., Iliar (MACN-In 18353, FMNH 125190, FMNH 17250, MLP 1484), Olta (MACN-In 13327, MLP 10477); Chamental Dept., Gobernador Gordillo (MCZ 182045, MLP 10476, MLP 10475); Famatina Dept., between Pituil and Campana (IFML 15358), Cuesta de Aguadita (IFML 15213 A, IFML 15364).

Family Simpulopsidae
Schileyko, 1999

Genus *Rhinus*
Albers, 1860

Type Species: *Bulimus heterotrichus* Moricand [original designation].

Geographic Distribution: Argentina, Brazil, Venezuela.

Rhinus argentinus
(Ancey, 1901)

Bulimulus (Rhinus) argentinus Ancey, 1901: 92; – Miquel, 1991: 103; Breure, 2011: 14.

Rhinus argentinus – Breure, 1978: 230, pl. 11, fig. 12; 1979: 130.

Type Locality: "Guaileguaychu, province d'Entrerios, République Argentine".

Type Material: syntypes RBINS/MT 1867 (3).

Distribution: Argentina, Entre Ríos Prov.

Remarks

The three syntypes are labeled as "types" in Ancey's handwriting. *Rhinus* was classified within Simpulopsidae by Breure (2011). No available material is deposited in the Argentinean collections reviewed.

Genus *Simpulopsis*
Beck, 1837

Type Species: *Helix sulculosa* Férussac, 1821 [subsequent designation by Albers, 1860].

Geographic Distribution: Argentina, Brazil, Paraguay, Peru, Ecuador, Colombia, Venezuela, Suriname, Guiana Francesa.

Simpulopsis (Eudioptus) citrinovitrea
(Moricand, 1836)

Helix (Cochlogena) citrino-vitrea Moricand, 1836: 436, pl. 2, fig. 19; – Breure, 1974a: 53.

Bulimulus (Paracochlea) willineri – Hylton Scott, 1967b: 93, figs. 1–4; Fernández, 1973a: 86.

Pseudoglandina agitata – Breure, 1978: 235.

Simpulopsis (Eudioptus) citrinovitrea – Breure, 1978: 234, figs. 411–415; 1979: 135; Neubert & Janssen, 2004: 205, pl. 17, fig. 208.

Simpulopsis (Eudioptus) willineri – Miquel, 1998: 185.

Type Locality: "Brazil, Bahia, near Salvador".

Type Material: syntypes MNHN, SMF 302256 (2).

Distribution: Brazil; Paraguay; Peru; Ecuador; Colombia; Argentina, Misiones Prov. (IFML 15705), San Ignacio (MLP13533). Salta Prov., Anta Dept., El Rey National Park (IFML15704 A, IFML 15703 A, IFML15706 A).

Remarks

Simpulopsis has been previously classified in Amphibuliminae (Zilch, 1959–1960; Breure, 1973); later Breure (1979) included it in Bulimulinae. Bouchet & Rocroi (2005) classified them in the tribu Simpulopsini Schileyko, 1999, of the

subfamily Bulimulinae. Breure (2011) relocated *Simpulopsis* and *Rhinus* in a separate family of the Orthalicoidea, Simpulopsidae Schileyko, 1999.

Simpulopsis (Eudioptus) eudioptus
(Ihering in Pilsbry, 1897)
[new combination]

Bulimulus (Protoglyptus) eudioptus Ihering in Pilsbry, 1897: 89, pl. 14, figs. 16, 17; – Haas, 1959: 367.

Bulimulus (Scansicochlea) jörgenseni Holmberg, 1912b: 150, figs. 7, 8; – Parodiz, 1957a: 134; Quintana, 1982: 90.

Naesiotus eudioptus – Breure, 1979: 69.

Bostryx eudioptus – Miquel, 1995: 120, pl. 1, figs. 1, 2.

Type Locality: “Sao Paulo, Brazil”.

Type Material: holotype ANSP 71240; paratypes ANSP 71240 (3), MZSP 620 (24), MZSP 7735 (2), MZSP 7746 (9), MZSP 3398 (1), MZSP 7737 (3).

Bulimulus (Scansicochlea) jörgenseni: holotype MACN-In 1377.

Distribution: Brazil; Chile; Argentina, *Jujuy Prov.* (MACN-In 15949), *Calilegua Dept.* (MLP 10167). *Misiones Prov.* (MACN-In 12062), *Candelaria Dept.*, *Colonia Bonpland* (MACN-In 1377); *Capital Dept.*, *Iguazú Dept.* (MLP 10166, MLP 10168, MLP 13534); *Libertador Gral. San Martín Dept.*, *Oberá Dept.* (MLP 10165); *San Ignacio Dept.* (MACN-In 12128, MACN-In 13023, MACN-In 16985, MACN-In 9705).

Remarks

Bulimulus eudioptus was originally described in the genus *Bulimulus* and subsequently changed to *Naesiotus* (Breure, 1979) and *Bostryx* (Miquel, 1995). Current classification of *B. eudioptus* into *Simpulopsis (Eudioptus)* is based on that this species shows morphological characters typical of the subgenus: the presence of spiral lines cutting axial wrinkles in the protoconch, fragile, near transparent shell walls, general shell shape and size, and the absence of penis sheath presenting a tunica-like over the distal portion of the reproductive system. Additionally, the pulmonary roof shows the typical dark spots that characterized most of *Simpulopsis* species, and the adrectal ureter is closed over its entire length.

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LITERATURE CITED

ADAMS, H. & A. ADAMS, 1853–1858, *The genera of recent Mollusca, arranged according to their organization*. John van Voorst, London, 2 vols.

- [1, 1–256, pls. 1–32 (1853); 1, 257–484, 2, 1–92, pls. 33–72 (1854); 2, 93–284, pls. 73–96 (1855); 2, 285–412, pls. 97–112 (1856); 2, 413–540, pls. 113–128 (1857); 2, 541–660, pls. 129–138 (1858)].
- ALBERS, J. C., 1850, *Die Heliceen, nach natürlicher Verwandtschaft systematisch Geordnet Erste Ausgabe*, Verlag von Th. Chr. Fr. Enslin, Berlin, 223 pp.
- ALBERS, J. C., 1860, *Die Heliceen nach natürlicher Verwandtschaft systematisch geordnet*, Verlag von Th. Chr. Fr. Enslin, Berlin, xviii + 359 pp.
- ANCEY, C. M. F., 1892, On some shells from eastern Bolivia and western Brazil. *Journal of Conchology*, 7: 90–97.
- ANCEY, C. M. F., 1897, Viaggio del Dott. Alfredo Borelli nel Chaco boliviano e nella Republica Argentina. XI. Resultats malacologiques accompagnés d'une notice sur les especes précédemment recueillis par ce voyageur. *Bolletín Museo Zoología Anatomía Comparada Universidad Torino*, 12: 1–22.
- ANCEY, C. M. F., 1901, Notes sur divers mollusques de l'Amérique du Sud accompagnées de descriptions d'espèces nouvelles. *Le Naturaliste*, 338: 81–82.
- ANTON, H. E., 1839, *Verzeichniss der Conchylien welche sich in der Sammlung von Hermann Eduard Anton befinden*. Halle, xvi + 110 pp.
- BAKER, H. B., 1963, Type land snail in the Academy of Natural Sciences of Philadelphia. Part II. Land Pulmonata, exclusive of North America north of Mexico. *Proceedings Academy of Natural Sciences of Philadelphia*, 115: 192–259.
- BARBOSA, A. F., V. K. DELHEY & E. V. COAN, 2008, Molluscan names and malacological contributions of Wolfgang Karl Weyrauch (1907–1970) with a brief biography. *Malacologia*, 50: 265–277.
- BECK, H., 1837, *Index Moluscorum praesentis aevi Musei Principis Augustissimi Christiani Frederici*. Stanford Library, Hafniae, 100 pp.
- BERTONI, A. W., 1926, Sobre moluscos del Paraguay. *Revista de la Sociedad Científica del Paraguay*, 2: 71–73.
- BOUCHET, P. & J. P. ROCROI, 2005, Classification and nomenclator of gastropod families. *Malacologia*, 47: 1–397.
- BREURE, A. S. H., 1973, Index to the Neotropical land Mollusca described by Alcide d'Orbigny, with notes on the localities of the mainland species. *Basteria*, 37: 113–135.
- BREURE, A. S. H., 1974a, Catalogue of Bulimulidae (Gastropoda, Euthyneura), I. Amphibuliminae. *Basteria*, 38: 51–56.
- BREURE, A. S. H., 1974b, Catalogue of Bulimulidae (Gastropoda, Euthyneura) II. Odontostominae. *Basteria*, 38: 109–127.
- BREURE, A. S. H., 1975, Types of Bulimulidae (Mollusca, Gastropoda) in the Museum National d'Histoire Naturelle, Paris. *Bulletin du Museum National d'Histoire Naturelle, Zoologie*, 233: 1137–1187.
- BREURE, A. S. H., 1978, Notes on and descriptions of Bulimulidae (Mollusca, Gastropoda). *Zoologische Verhandelingen*, 164: 1–255.
- BREURE, A. S. H., 1979, Systematics, phylogeny and zoogeography of Bulimulinae (Mollusca). *Zoologische Verhandelingen*, 168: 1–229.
- BREURE, A. S. H., 2011, Annotated type catalogue of the Orthalicoidea (Mollusca, Gastropoda) in the Royal Belgian Institute of Sciences, Brussels, with descriptions of two new species. *ZooKeys*, 101: 1–50.
- BREURE, A. S. H. & G. COPPOIS, 1978, Notes on the genus *Naesiotus* Albers, 1850 (Mollusca, Gastropoda, Bulimulidae). *Netherlands Journal of Zoology*, 28: 161–192.
- BREURE, A. S. H. & A. A. C. ESKENS, 1981, Notes on and descriptions of Bulimulidae (Mollusca, Gastropoda). *Zoologische Verhandelingen*, 186: 1–111.
- BREURE, A. S. H. & J. R. SCHOUTEN, 1985, Notes on and descriptions of Bulimulidae (Mollusca, Gastropoda), III. *Zoologische Verhandelingen*, 216: 1–98.
- BREURE, A. S. H. & F. J. BORRERO, 2008, An annotated checklist of the land snails family Orthalicidae (Gastropoda: Pulmonata: Orthalicoidea) in Ecuador, with notes on the distribution of the mainland species. *Zootaxa*, 1768: 1–40.
- BREURE, A. S. H., J. D. S. GROENENBERG & M. SCHILTHUIZEN, 2010, New insights in the phylogenetic relations within the Orthalicoidea (Gastropoda, Stylommatophora) based on 28S sequence data. *Basteria*, 74: 25–31.
- BREURE, A. S. H. & J. D. ABLETT, 2012, Annotated type catalogue of the Bothriembryontidae and Odontostomidae (Mollusca, Gastropoda, Orthalicoidea) in the Natural History Museum, London. *ZooKeys*, 182: 1–70.
- BREURE, A. S. H. & P. ROMERO, 2012, Support and surprises: a new molecular phylogeny of the land snail superfamily Orthalicoidea (Gastropoda, Stylommatophora) using a multi-locus gene analysis. *Archiv für Molluskenkunde*, 141: 1–20.
- BROOKS, S. T., 1936, The land snails collected during the 1936 voyage of the "Vagabondia" with descriptions of new species of *Plectostylus*. *Annals of the Carnegie Museum*, 25: 123–126.
- CAMPOS SALGADO, N. & L. H. DOS SANTOS COELHO, 2003, Moluscos terrestres do Brasil (gastropodes operculados ou não exclusive Veronicellidae, Milacidae e Limacidae). *Revista de Biologia Tropical*, 51: 149–189.
- CAZZANIGA, N. J. & M. V. FERNÁNDEZ CANIGIA, 1985, Aporte al conocimiento de *Plagiodontes patagonicus* (d'Orbigny) y *P. magnus* Hylton Scott (Gastropoda: Odontostomidae). *Spheniscus*, 1: 35–51.
- CAZZANIGA, N., J. PIZÁ & N. GEZZI, 2005, Intraspecific clinal variation in *Plagiodontes patagonicus* (Gastropoda: Orthalicidae, Odontostominae), an endemic species from Argentina. *Journal of Natural History*, 39: 2203–2216.
- COAN, E. V. & R. E. PETIT, 2011, The publications and malacological taxa of William Wood (1774–1857). *Malacologia*, 54(1–2): 1–76.
- DA COSTA, S. I., 1906, Descriptions of new species of land snails from Peru and Clombia and two new species of *Curvella* from the Philippine

- Islands. *Proceedings of the Malacological Society of London*, 7: 97–99.
- DALL, W. H., 1896, Insular landshell faunas, especially as illustrated by the data obtained by Dr. G. Baur in the Galapagos Islands. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 1896: 395–460.
- D'ORBIGNY, A., 1834–1847, *Voyage dans l'Amérique Meridionale*, 5(3): Mollusques, Chez C. P. Bertrand, Paris, 758 pp.
- D'ORBIGNY, A., 1835, Synopsis terrestrium et fluviatilium molluscorum, in suo per Americam meridionalem itinere. *Magasin de Zoologie*, 5: 1–44.
- DOERING, A., 1874a, Apuntamiento sobre la fauna de moluscos de la República Argentina (primera parte). *Boletín de la Academia de Ciencias Exactas*, Cordoba, 1: 48–77.
- DOERING, A., 1874b [1875], Apuntes sobre la fauna de Moluscos de la República Argentina (segunda parte). *Boletín Academia Nacional de Ciencias de la República Argentina*, 1: 424–460.
- DOERING, A., 1874c [1875], Estudios sistemáticos y anatómicos sobre los moluscos pulmoníferos de los países del Plata. *Periódico Zoológico*, 1: 129–203.
- DOERING, A., 1875a [1877], Apuntes sobre la fauna de moluscos de la República Argentina (tercera parte). *Boletín de la Academia de Ciencias Exactas*, 2: 300–340.
- DOERING, A., 1875b [1877], Apuntes sobre la fauna de moluscos de la República Argentina. *Periódico Zoológico*, 2: 219–259.
- DOERING, A., 1878, Verzeichniss der im Laplatagebiet lebenden Binnenmollusken. *Jahrbücher der Deutschen Malakozoologischen Gesellschaft*, 5: 130–151.
- DOERING, A., 1879, Apuntes sobre la fauna de Moluscos de la República Argentina (cuarta parte). *Boletín de la Academia Nacional de Ciencias de la República Argentina*, III: 63–84.
- DOERING, A., 1881, Moluscos. Pp. 61–75, in: *Informe oficial de la comisión científica agregada al estado mayor general de la expedición al Rio Negro (Patagonia), realizada en los meses de abril, mayo y junio de 1879, bajo las órdenes del general Don Julio A. Roca*. Imprenta Ostwald y Martinez, Buenos Aires, 530 pp.
- DOERING, A., 1884, Moluscos Pulmonata Stylomatophora. *Acta Academia Nacional de Ciencias de Cordoba*, 5: 111–115.
- DOHRN, H., 1875, Miscellen von H. Dohrn. Als Fortsetzung der Zeitschrift für Malakozoologie. Herausgegeben von Dr. L. Pfeiffer. *Malakozoologische Blätter*, 22: 202–203.
- DOHRN, H., 1877, Conchyliologische Miscellen. *Malakozoologische Blätter*, 24: 157–159.
- DUBOIS, A., 2010, Retroactive changes should be introduced in the Code only with great care: problems related to the spelling of the nomina. *Zootaxa*, 2426: 1–42.
- DUBOIS, A., A. MINELLI & Z. ZHANG, 2011, Recommendations about nomenclature for papers submitted to *Zootaxa*. *Zootaxa*, 2943: 58–62.
- FERNÁNDEZ, D., 1969, Contribución al estudio anatómico de *Peronaeus (Lissoacme) aguirrei* (Doering) y *Peronaeus (Lissoacme) ameghinoi* (Ihering). *Neotropica*, 15: 119–124.
- FERNÁNDEZ, D., 1970, Contribución al estudio anatómico de *Peronaeus (Lissoacme) azulensis* (Doering). *Neotropica*, 16: 65–68.
- FERNÁNDEZ, D., 1971, Dos nuevos odontostóminos de Cordoba: *Spixia estherae* y *Spixia albostrata*. *Anales de la Sociedad Científica Argentina*, 191: 53–63.
- FERNÁNDEZ, D., 1973a, Catalogo de la malacofauna terrestre Argentina. *Comisión de Investigaciones Científicas de la Provincia de Buenos Aires*, 4: 1–197.
- FERNÁNDEZ, D. & Z. A. CASTELLANOS, 1973b, Clave genérica de la malacofauna terrestre Argentina. *Revista del Museo Argentino de Ciencias Naturales*, 11: 263–285.
- FERNÁNDEZ, D. & A. RUMI, 1980, *Pilsbrylia hyltonae*, nueva especie de pulmonado del norte Argentino. *Neotropica*, 26: 75–78.
- FERNÁNDEZ, D. & A. RUMI, 1984, Contribución al conocimiento de la malacofauna del parque nacional “El Rey” Prov. Salta, República Argentina (en especial del Cerro Maldonado). *Revista del Museo de La Plata*, 13: 211–221.
- FÉRUSAC, A. É. J. P. J. F. d'A. de, 1821, *Table aux systématiques des animaux mollusques classés en familles naturelles, dans lesquels on a établi la concordance de tous les systèmes; suivis d'un prodrome général pour tous les mollusques terrestres ous fluviatiles, vivants ou fossiles*. Paris, London, 94 pp. [first ed.], 90 pp. [second ed.].
- FÉRUSAC, A. É. J. P. J. F. d'A. de & G. P. DESHAYES, 1851, *Histoire naturelle générale et particulière des mollusques terrestres et fluviatiles*. Baillière, Paris, vol.:1: 402 pp.; vol. 2: 260 pp.; vols. 3–4: 22 pp.
- FORMICA CORSI, A., 1900, Moluscos de la República Oriental del Uruguay. *Anales del Museo Nacional de Montevideo*, 2: 291–525.
- GRAY, J. E., 1854, *List of the shells of South America in the collection of the British Museum, collected and described by Alcide d'Orbigny in the Voyage dans l'Amérique Meridionale*. Taylor & Francis, London, 89 pp.
- HAAS, F., 1936, Malakologische Bemerkungen und Neubeschreibungen. *Senckenbergiana*, 18: 143–154.
- HAAS, F., 1959, Inland mollusks from Venezuela, southern Brazil, and Peru. *Fieldiana Zoology*, 39: 363–371.
- HIDALGO, J. C., 1870, Catalogue des coquilles terrestres recueillies par les naturalistas de la comisión scientifique espagnole sur divers points de l'Amérique meridionales. *Journal de Conchyliologie*, 18: 27–70.
- HOLMBERG, E. L., 1884, Viajes a las sierras de Tandil y de la Tinta (Hymenoptera-Apidae). *Actas de la Academia Nacional de Ciencias en Cordoba*, 5: 1–136.
- HOLMBERG, E. L., 1909a, Moluscos geophila Argentina nova. *Apuntes Historia Natural*, Buenos Aires, 1: 9–12.
- HOLMBERG, E. L., 1909b, Mollusca Argentina nonnulla. *Apuntes Historia Natural*, Buenos Aires, 1: 27–28.

- HOLMBERG, E. L., 1909c, Mollusca Argentina varia. *Apuntes Historia Natural*, Buenos Aires, 1: 91–92.
- HOLMBERG, E. L., 1912a, Moluscos argentinos en parte nuevos coleccionados por Franco Pastore. *Physis*, 1: 19–26.
- HOLMBERG, E. L., 1912b, Bulimuli et Odontostomi Argentini adhuc indescipti, necnon species ad subgenus nondum relatae. *Anales del Museo Nacional de Historia Natural*, 23: 147–153.
- HYLTON SCOTT, M. I., 1945, Fáunula malacológica de Tilcara. *Revista Museo de La Plata*, 4: 195–211.
- HYLTON SCOTT, M. I., 1948a, Moluscos del biotopo del Cerro Colorado (Salta). *Acta Zoológica Lilloana*, 6: 229–239.
- HYLTON SCOTT, M. I., 1948b, Moluscos del noroeste argentino. *Acta Zoológica Lilloana*, 6: 241–274.
- HYLTON SCOTT, M. I., 1951a, Nuevos moluscos terrestres del Norte Argentino. *Acta Zoológica Lilloana*, 10: 5–29.
- HYLTON SCOTT, M. I., 1951b, *Kuschelenia*, nuevo género de Bulimulidae. *Acta Zoológica Lilloana*, 12: 539–543.
- HYLTON SCOTT, M. I., 1952, Nuevos moluscos terrestres del norte Argentino. *Acta Zoológica Lilloana*, 10: 5–29.
- HYLTON SCOTT, M. I., 1954, Una nueva especie de *Bostryx* (Bulimulidae) (Mol. Pulm.). *Physis*, 20: 409–413.
- HYLTON SCOTT, M. I., 1963, Moluscos terrestres y de agua dulce de la Patagonia. Pp. 385–398, in: C. D. DEBOUDEVILLE & E. RAPPORT, eds., *Biologie de L'Amérique Australe*. Centre Nationale de la Recherche Scientifique. CNRS-CONICET. Paris, 400 pp.
- HYLTON SCOTT, M. I., 1965, Anotaciones sobre los moluscos de Chancani-Cordoba (Gastrópoda, Pulmonata). *Neotropica*, 11: 23–26.
- HYLTON SCOTT, M. I., 1966, Nueva *Cyclodontina* y revaloración del subgénero *Clessinia* Doering, 1874. *Neotropica*, 12: 30–35.
- HYLTON SCOTT, M. I., 1967a, Nuevos odontostomidos de Cordoba. *Neotropica*, 13: 97–103.
- HYLTON SCOTT, M. I., 1967b, Nuevas *Scansicochlea* de la región central de la Argentina. *Neotropica*, 13: 7–12.
- HYLTON SCOTT, M. I., 1971, Novedades sobre gastrópodos serranos de la Argentina. *Neotropica*, 17: 73–78.
- IHERING, H. VON, 1908, Mollusques du Pampé en de Mar del Plata et Chapalmalán, recueillis par M. le Dr. Florentino Ameghino en 1908. *Anales del Museo Nacional de Historia Natural*, 10: 429–438.
- IHERING, H. VON, 1914, Catálogo de molluscos cretáceos e terciários da Argentina da coleção do autor. *Notas do Museu Paulista*, 1: 1–148.
- INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE, 1999, *International Code of Zoological Nomenclature*, 4th ed. International Trust for Zoological Nomenclature, I. T. Z. N., London, xxix + 306 pp.
- KLAPPENBACH, M. A. & J. OLAZARRI, 1973, El género *Scalarinella* Dohrn, 1874 (Mollusca Gastropoda) en el Uruguay. Pp. 111–116, in: *Museo Nacional de Historia Natural. Congreso Latinoamericano de Zoología*. Montevideo, Uruguay, 230 pp.
- KOBELT, W., 1876, Diagnosen neuer Arten argentinische Landschnecken. *Nachrichtenblatt der Deutschen Malakozoologischen Gesellschaft*, 8: 3–8.
- KOBELT, W., 1878, Argentinische Landconchylien von W. Kobelt. *Jahrbücher der Deutschen Malakozoologischen Gessellschaft*, 5: 143–150.
- KOBELT, W., 1880, Argentinische Landconchylien. *Jahrbücher der Deutschen Malakozoologischen Gesellschaft*, 7: 286–292.
- KOBELT, W., 1882, Museum Löbbeckeanum. *Jahrbücher der Deutschen Malakozoologischen Gesellschaft*, 9: 1–8.
- KÖHLER, F., 2007, Annotated type catalogue of the Bulimulinae (Pulmonata, Orthalicoidea, Bulimulidae) in the Museum fur Naturkunde Berlin. *Mitteilungen aus dem Museen für Naturkunde in Berlin, Zoologisch Reihe*, 83(2): 125–159.
- KÜSTER, H. C. & L. PFEIFFER, 1840–1865, Die Bulimiden und Achatinen. Abbildungen nach der Natur. Die Gattungen *Bulimus*, *Partula*, *Achatinella*, *Achatina* und *Azeca*. In: *Abbildungen nach der Natur mit Beschreibungen. Systematisches Conchylien-Cabinet von Martini und Chemnitz*. Nürnberg, 1(13)[(1)]: iii–xix, 1–395, pls. 1–70.
- LANGE DE MORRETES, F., 1954, Adenda e corrigenda ao ensaio de Catálogo dos Moluscos do Brasil. *Arquivos do Museu Paranaense*, Curitiba, 10: 37–76.
- LINARES, E. L. & M. VERA, 2011, Catalogo preliminar de los moluscos continentales de Colombia. Universidad Nacional de Colombia. *Biblioteca José Jerónimo Triana*, 22: 1–272.
- MARSHALL, W. B., 1931, New land and fresh water mollusks from South America. *Proceedings of the United States National Museum*, 77: 1–7.
- MARTENS, K. E. VON, 1868, Ueber südbrasilianische Land- und Süßwasser-Mollusken. *Malakozoologische Blätter*, 15: 169–217.
- MARTENS, K. E. VON, 1875, Literaturberichte Strobel Pell., materiali per una Malacostatica di terra e d'acqua dolce dell'Argentina Meridionale. *Jahrbücher der Deutschen Malakozoologischen Gesellschaft*, 2: 268–276.
- MARTENS, K. E. VON, 1887, Neue Landschnecken aus Mittel und Süd-Amerika. *Sitzungsberichte der Gesellschaft naturforschender Freunde zu Berlin*, 1886: 161–162.
- MARTENS, K. E. VON, 1890–1901, *Land and fresh water Mollusca. Biologia Centrali Americana*. F. Ducane Goldman & O. Salvin, London, 675 pp.
- MAWE, J., 1823, *The Linnaean system of conchology, describing the orders, genera, and shells, arranged into divisions and families: with a view to facilitate the attainment of the science*. Printed for and sold by the author, Mc Dowal Printer, London, xv + 207 pp.
- MIQUEL, S. E., 1989a, Las especies vivientes del género *Naesiotus* Albers, 1850 (Gastropoda, Stylommatophora, Bulimulidae) en la República Argentina. *Studies on Neotropical Fauna and Environment*, 24: 61–73.

- MIQUEL, S. E., 1989b, El género *Drymaeus* Albers, 1850 (Gastropoda, Stylommatophora, Bulimulidae) en la República Argentina. *Studies on Neotropical Fauna and Environment*, 24: 75–86.
- MIQUEL, S. E., 1991, El género *Bulimulus* Leach, 1814 (Mollusca, Gastropoda, Stylommatophora) en la Republica Argentina. *Studies on Neotropical Fauna and Environment*, 26: 93–112.
- MIQUEL, S. E., 1993, Las especies del género *Bostryx* Troschel, 1847 en la República Argentina (1ra. parte) (Gastropoda Stylommatophora: Bulimulidae). *Archiv für Molluskenkunde*, 121: 157–171.
- MIQUEL, S. E., 1995, Las especies del género *Bostryx* Troschel, 1847 en la República Argentina (2da. y última parte) (Gastropoda Stylommatophora: Bulimulidae). *Archiv für Molluskenkunde*, 124: 119–127.
- MIQUEL, S. E., 1998, Redescription of Argentinean species of the genera *Discoleus*, *Plectostylus*, *Scutalus* and *Simpulopsis* (Gastropoda, Stylommatophora, Bulimulidae). *Studies on Neotropical Fauna & Environment*, 33: 178–187.
- MORICAND, S., 1836, Mémoire sur les coquilles terrestres et fluviatiles, envoyées de Bahia par M. J. Blanchet. *Mémoires de la Société de physique et d'histoire naturelle de Genève*, 7: 415–446.
- NEUBERT, E. & R. JANSSEN, 2004, Die Typen und Typoide des Natur-Museums Senckenberg: Mollusca: Gastropoda: Pulmonata: Orthali-coidea: Bulimulidae, Orthalicidae, Placostylidae. *Archiv für Molluskenkunde*, 133: 193–297.
- PARODIZ, J. J., 1939, Revisión de *Plagiodontes* y *Scalarinella* (Odontostominae). *Physis*, 17: 711–734.
- PARODIZ, J. J., 1940, *Ventania*, nuevo subgénero de *Odontostomus*. *Notas del Museo de La Plata*, 5: 227–234.
- PARODIZ, J. J., 1941, Four new species of *Spixia* from Argentina. *The Nautilus*, 54: 92–95.
- PARODIZ, J. J., 1942a, Los Odontostominos de la Argentina (primera parte). *Physis*, 19: 191–218.
- PARODIZ, J. J., 1942b, Los Odontostomidos de la Argentina (segunda parte). *Physis*, 19: 219–343.
- PARODIZ, J. J., 1944, Contribuciones al conocimiento de los moluscos terrestres sudamericanos, II. *Comunicaciones Zoológicas del Museo de Historia Natural de Montevideo*, 1: 1–8.
- PARODIZ, J. J., 1946a, Contribuciones al conocimiento de los moluscos terrestres sudamericanos, IV. *Comunicaciones Zoológicas del Museo de Historia Natural de Montevideo*, II: 1–14.
- PARODIZ, J. J., 1946b, Los géneros de los Bulimulinae Argentinos. *Revista del Museo de La Plata, Sección Zoología*, 4: 303–371.
- PARODIZ, J. J., 1947, Contribuciones al conocimiento de los moluscos terrestres Sudamericanos, V. *Comunicaciones Zoológicas del Museo de Historia Natural de Montevideo*, 2: 1–32.
- PARODIZ, J. J., 1948, Contribuciones al conocimiento de los moluscos terrestres Sudamericanos-VI. *Comunicaciones Zoológicas del Museo de Historia Natural de Montevideo*, 2: 1–22.
- PARODIZ, J. J., 1951, Una nueva especie de *Plectostylus* (Gastropoda. Pulmonata) de la Argentina. *Physis*, 20: 334–335.
- PARODIZ, J. J., 1956a, Cuatro nuevas especies de *Scansicochlea* de Argentina (Mol. Pulm.). Primera parte. *Neotropica*, 2: 59–64.
- PARODIZ, J. J., 1956b, Cuatro nuevas especies de *Scansicochlea* de Argentina (Mol. Pulm.). Segunda parte. *Neotropica*, 2: 77–80.
- PARODIZ, J. J., 1957a, Catalogue of the land Mollusca of Argentina. *The Nautilus*, 70: 127–135.
- PARODIZ, J. J., 1957b, Catalogue of the land Mollusca of Argentina. *The Nautilus*, 71: 22–30.
- PARODIZ, J. J., 1961, Moluscos terrestres, hasta ahora conocidos, de la provincia de Mendoza. *Revista Científica Museo Historia Natural San Rafael*, 1: 59–62.
- PARODIZ, J. J., 1962, New and little-know species of South and Central American land snails (Bulimulidae). *Proceedings of the United States National Museum*, 113: 429–456.
- PARRAVICINI, G., 1894, Viaggio del Dottor Alfredo Borelli nella República Argentina e nel Paraguay, IV. Molluschi. *Bolletín Museo Zoología Anatomía Comparada Universidad Torino*, 9: 1–10.
- PETIT, S., 1853, Description de deux coquilles nouvelles appartenant aux genres *Fusus* et *Bulimus*. *Journal de Conchologie*, 4: 249–251.
- PFEIFFER, L., 1846a, Description of thirty new species of Helicea in the collection of H. Cuming Esq. *Proceedings of the Zoological Society of London*, for 1846 [14]: 28–34.
- PFEIFFER, L., 1846b, Description of thirty-eight new species of land dhells in the collection of Hugh Cuming, Esq. *Proceedings of the Zoological Society of London*, for 1846 [14]: 109–116.
- PFEIFFER, L., 1848, *Monographia heliceorum viventium. Sistens descriptiones systematicas et criticas omnium huius familiae generum et specierum hodie cognitarum*. Brockhaus, Lipsiae, 2: 594 pp.
- PFEIFFER, L., 1850, Neue Landschnecken. *Zeitschrift für Malakozoologie*, 7: 13–15.
- PFEIFFER, L., 1853, *Monographiae heliceorum viventium. Sistens descriptiones systematicas et criticas omnium huius familiae generum et specierum hodie cognitarum*. Brockhaus, Lipsiae, 3: viii + 711 pp.
- PFEIFFER, L., 1855, Versuch einer Anordnung der Heliceen nach natürlichen Gruppen. *Malakozoologische Blätter*, 2: 112–188.
- PFEIFFER, L., 1856, Description of twenty five new species of land shells, from the collection of Hugh Cuming, Esq. *Proceedings of the Zoological Society of London*, for 1856 [24]: 32–36.
- PFEIFFER, L., 1859, *Monographiae heliceorum viventium. Sistens descriptiones systematicas et criticas omnium huius familiae generum et specierum hodie cognitarum*. Brockhaus, Lipsiae, 4: ix + 920 pp.
- PFEIFFER, L., 1867a, Description brevis molluscorum quorundam terrestrium a cl. Vivo Antonio Raimondi in Peruvia lectorum. *Malakozoologische Blätter*, 14: 76–80.

- PFEIFFER, L., 1867–1869b, *Novitates conchologicae. Series Prima. Mollusca Extramarina. Beschreibung und Abbildung neuer oder kritischer Land- und Süßwasser mollusken (Mit Einschluss der Auriculacsen)*. Theodor Fischer, Casel, 3: 301–510 pp.
- PFEIFFER, L., 1868, *Monographiae heliceorum viventium. Sistens descriptiones systematicas et criticas omnium huius familiae generum et specierum hodie cognitarum*. Brockhaus, Lipsiae, 5: xii + 565 pp.
- PFEIFFER, L., 1876, *Monographia heliceorum viventium. Descriptiones systematicas et criticas omnium huius familiae generum et specierum hodie cognitarum*. Brockhaus, Leipzig, 7: 674 pp.
- PFEIFFER, L., 1877, *Monographiae heliceorum viventium. Descriptiones systematicas et criticas omnium huius familiae generum et specierum hodie cognitarum*. Brockhaus, Lipsiae, 8: x + 729 pp.
- PILSBRY, H. A., 1895–1896, American bulimi and bulimuli. *Strophocheilus, Plekocheilus, Auris, Bulimulus*. *Manual of Conchology*, 10: iv + 213 pp., 51 pls. [pp. 1–48, pls. 2–15, Aug. 20, 1895; pp. 49–96, pls. 16–30, Nov. 26, 1895; pp. 97–144, pls. 31–40, Mar. 13, 1896; pp. 145–213, i–iv, pls. 1, 41–51, Sept. 23, 1896].
- PILSBRY, H. A., 1896a, A new species of *Bulimus*. *The Nautilus*, 10: 41.
- PILSBRY, H. A., 1897–1898, American Bulimulidae: *Bulimulus, Neopetraeus, Oxychona* and South American *Drymaeus*. Volume XI. *Manual of Conchology, Second Series: Pulmonata*. Conchological Section. Academy of Natural Sciences of Philadelphia, 339 pp., 51 pls. [pp. 1–64, pls. 1–13, May 11, 1897; pp. 65–144, pls. 14–25, Oct. 15, 1897; pp. 145–208, pls. 27–41, May 3, 1898; pp. 209–339, pls. 26, 42–51, Dec. 7, 1898].
- PILSBRY, H. A., 1897a, Description of new South American bulimuli. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 49: 18–22.
- PILSBRY, H. A., 1898a, Notes on the genus *Odontostomus*. *The Nautilus*, 12: 57–58.
- PILSBRY, H. A., 1898b, New species of *Odontostomus* from Brazil and Argentina. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 50: 471–474.
- PILSBRY, H. A., 1901–1902, Oriental bulimulid Helicidae. Odontostominae, Cerionidae. Volume XIV. *Manual of Conchology, Second Series: Pulmonata*. Conchological Section. Academy of Natural Sciences of Philadelphia, 302 + xcix pp., 62 pls. [pp. 1–64, pls. 1–15, June 7, 1901; pp. 65–128, pls. 16–21, Sept. 6, 1901; pp. 129–192, pls. 22–36, Nov. 29, 1901; pp. 193–302, pls. 37–62, April 19, 1902; i–xcix – Appendix to vol. 11, Oct. 28, 1902].
- PILSBRY, H. A., 1930, South American land and freshwater mollusks: notes and description VII. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 82: 355–365.
- PIZÁ, J. & N. J. CAZZANIGA, 2003, Redescription, shell variability and geographic distribution of *Plagiodontes dentatus* (Wood, 1828) (Gastropoda: Orthalicidae: Odontostominae) from Uruguay and Argentina. *Zootaxa*, 154: 1–23.
- PIZÁ, J., N. GEHZI & N. J. CAZZANIGA, 2006, A rare endemic land snail from Argentina: *Plagiodontes rocae* Doering, 1881. *Archiv für Molluskenkunde*, 135: 91–99.
- PIZÁ, J. & N. J. CAZZANIGA, 2009, A new species of *Plagiodontes* from Argentina, and new data on the anatomy of four other species in the genus (Gastropoda: Orthalicidae, Odontostominae). *Journal of Natural History*, 43: 23–24.
- PIZÁ, J. & N. J. CAZZANIGA, 2010, Allopatry and anatomical distinctiveness of two puzzling land snails in genus *Plagiodontes*, from Argentina (Gastropoda: Orthalicidae, Odontostominae). *Malacologia*, 53: 1–24.
- PIZÁ, J. & N. J. CAZZANIGA, 2012, Barrels and pagodas: clarifying the identity and variability of two nominal taxa of carinated land snails in the genus *Plagiodontes* (Gastropoda: Orthalicidae: Odontostominae). *Journal of Natural History*, 46: 383–410.
- PRESTON, H. B., 1907, Descriptions of new species of land and freshwater shells from Central and South America. *Annals Magazine of Natural History*, 20: 490–498.
- QUINTANA, M., 1982, Catálogo preliminar de la malacofauna del Paraguay. *Revista del Museo Argentino de Ciencias Naturales, Zoología*, 11: 61–158.
- RAMÍREZ, R., C. PAREDES & J. ARENAS, 2003, Moluscos del Perú. *Revista de Biología Tropical*, 51: 225–284.
- RAFINESQUE, C. S., 1833, New genera of land shells from Buenos Aires, South America. *Atlantic Journal and Friend of Knowledge*, 5: 1–212.
- REEVE, L. A., 1849, Monograph of the genus *Bulimus*. *Conchologia iconica illustrations shells of molluscos animals*, 5: 89 pls.
- RICHARDSON, C. L., 1993, Bulimulacea: catalogue of species. Amphibulimidae, Anadromidae, Gangrellidae, Odontostomidae, Orthalicidae. *Tryonia*, 27: 1–164.
- RICHARDSON, C. L., 1995, Bulimulidae: catalogue of species. *Tryonia*, 28: 1–458.
- ROLLE, H., 1908, Ein neuer *Odontostomus*. *Nachrichtenblatt der Deutschen Malakozoologischen Gesellschaft*, 40: 160–161.
- SALAS OROÑO, E., 2007, Taxonomic review of the *Spixia pyriformis* species complex (Gastropoda, Pulmonata, Odontostominae). *Zootaxa*, 1498: 1–25.
- SALAS OROÑO, E., 2010, A new species of *Spixia* from Argentina (Gastropoda, Stylomatophora, Odontostominae). *Journal of Conchology*, 40: 305–313.
- SCARABINO, F., 2003, Lista sistemática de los Gastropoda terrestres de Uruguay. *Comunicaciones de la Sociedad Malacológica del Uruguay*, 8: 203–214.
- SCHLESCH, H., 1935, Eine neue Subspezies von *Bulimulus (Bulimulus) sporadicus* Orb. aus Paraguay (*Bul. sporadicus shadie*). *Archiv für Molluskenkunde*, 67: 86–87.

- SIMONE, L. R. L., 2006, *Land and freshwater molluscs of Brazil*. EGB Fapesp, São Paulo, 390 pp.
- SOWERBY, G. B., 1824, Descriptions, accompanied by figures, of several new species of shells. *The Zoological Journal*, 1: 56–60.
- STROBEL, P., 1874, *Materiali per una malacostatica di terra e di acqua dolce dell'Argentina meridionale*. Biblioteca Malacologica, Pisa, lxxx + 142 p., [4] leaves of pls.
- STUARDO, J. & C. VALDOVINOS, 1985, Lista sinonimica de bulimulidos chilenos (Mollusca: Pulmonata). *Boletín de la Sociedad de Biología*, Concepción, Chile, 56: 55–58.
- SWAINSON, W., 1840, *A treatise of malacology, shell and shell fish. Part II: A natural arrangement of the univalve and the bivalve shell fish composing the orders Gasteropoda and Dithyra of the class Testacea*. Longman, Orme, Brown, Green & Longman, London, vii + 419 pp.
- VALDOVINOS, C. & J. STUARDO, 1988, Morfología, sistemática y distribución del género *Plectostylus* Beck, 1837 (Pulmonata: Bulimulidae). *Gayana*, 52: 115–195.
- SPIX, J. A., 1827, *Testacea fluviatilia quae in itinere per brasiliam*. Schrank & Martius, Lipsiae, vi + 36 p., 29 leaves of pls.
- WEYRAUCH, W. K., 1964, Nuevos gastopodos terrestres y nuevos sinónimos de Sudamérica II. *Acta Zoológica Lilloana*, 20: 33–60.
- WEYRAUCH, W. K., 1965, Tres nuevos gastrópodos terrestres de Sudamérica. *Neotropica*, 11: 71–76.
- WHEELER, Q., 1995, The “Old systematics”: classification and phylogeny. Pp. 31–62, in: J. PAKALUK & S. A. SLIPINSKI, eds., *Biology, phylogeny and classifications of Coleoptera*. Muzeum I Instytut Zoologii PAN, Warszawa, 1,092 pp.
- WHEELER, Q., 2004, Taxonomic triage and the poverty of phylogeny. *Philosophical Transactions of the Royal Society of London*, 359: 571–583.
- WOOD, W., 1828, *Supplement to the Index Testaceologicus; or a catalogue of shells, British and foreign*. London, iv + 59 pp, 8 pls.
- WOOD, H. & J. GALLICHAN, 2008, The new molluscan names of César-Marie-Félix Ancey including illustrated type material from the National Museum of Wales. *Biotir Reports, Studies in Biodiversity and Systematics of Terrestrial Organisms from the National Museum of Wales*, 3: 1–162.
- ZILCH, A., 1959–1960, Gastropoda: Euthyneura. In: O. H. SCHINDEWOLF, ed., *Handbuch der Paläozoologie*. Bornträger, Berlin, xii + 834 pp.
- ZILCH, A., 1971, Die Typen und Typoide des Natur-Museums Senckenberg, 47: Mollusca-Euthyneura von A. Döring aus Argentinien. *Archiv für Molluskenkunde*, 101: 195–213.
- ZISCHKA, R., 1953, Catálogo de las conchas y caracoles bolivianos. *Folia Universitaria*, 10: 69–85.

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